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DOWN AFRICA'S SKYWAYS

By
BENJAMIN BENNETT

LONDON
HUTCHINSON & CO. (Publishers) LTD

Supplied by :
ALAVI BOOK DEPOT

Printed in Great Britain at
The Mayflower Press, Plymouth. William Brendon & Son, Ltd.
1932

TO THE BRAVE PIONEERS WHO
HELPED TO LIGHT UP THE DARK

B.B.

INTRODUCTION

AFRICA IS NO LONGER THE "DARK CONTINENT." A score of men and women from Van Rynveld and Cobham to Glen Kidston, Mollison and Peggy Salaman, have pioneered down her vast perilous skyways, over trackless jungleland, crocodile swamps and sun-racked wastes. By the light these trail blazers shed, Imperial Airways have forged a giant aerial chain linking London to Cape Town.

Few of the pioneers have sought either personal triumph or publicity. Rather have triumph and publicity been thrust upon them. They have raced away from Stag Lane, Croydon and Lympne into drizzly dawns, ominous nights; battled with storms and winds, plunged like petrol-fed lightning through ghost worlds of cloud into they knew not what; suffered a hundred hardships and sweated with heart-breaking engines; been numbed by icy blasts at 20,000 feet and shrivelled by furnace heat in the tropics.

Yet when they set out to brave all these trials of Africa, they tried to escape the camera batteries, the publicity spotlight and the marvellous organisation of the modern newspaper. They tried mostly in vain. Romance, adventure, is not yet dead. The newspapers, the mirror of all the world's good fortune and tragedy, triumphs and failures, tore away the cloak of desired secrecy and banner-headlined the great air adventures throughout the five continents.

The idea of this book came shortly after the aeroplane disaster in which Commander Glen Kidston and Captain T. A. Gladstone lost their lives, on

May 5, 1931. A South African public, generous in its tribute to the brave, was contributing to a "Kidston Memorial." The author wanted to dedicate a memorial, not only to Glen Kidston, but to all the pioneers before him. He had met nearly all of them in the course of his newspaper work; heard in their own modest words of the dangers they had encountered; learnt something of the horror that assails, even the iron-nerved when engines fail and below lurks—death, perhaps.

And so after the official inquiry into Kidston's death on the Mountain-of-The-Little-Teeth, he thought back on the adventures of Africa's pioneers and set them down as simply as an admiring pen would allow. Later in the year the London society girl, Miss Peggy Salaman, shattered Kidston's London-Cape record and the author included her amazing exploit among the stories of the aerial conquests of Africa.

This book is not greatly concerned with the different types of aeroplanes and engines used in the flights down Africa; nor with the hundred and one mechanical difficulties experienced. It is intended mainly to portray the romance of the great air adventures for the benefit of boys—the greatest hero-worshippers—and the layman who cannot tell off-hand the difference between the cockpit and the propeller of an aeroplane.

If the busy world, taking for granted to-day 10,000-mile aeroplane journeys, finds a few spare moments to read this story of Africa's air pioneers, while the air liners of Imperial Airways sail safely over the continent's many perils, the author will consider his work well done.

In writing and editing *Down Africa's Skyways*, he has been rendered great assistance in the preparation of the chapters on Sir Alan Cobham, Lieutenant Caspareuthus and Glen Kidston, by Mr. J. S. M. Simpson, of the editorial staff of the *Cape Argus*. He

also desires to thank the *Star*, Johannesburg, and the *Cape Argus*, Cape Town, through whose courtesy he has been able to present numerous illustrations of the pioneers down Africa's skyways ; and Mr. J. S. Dunn, General Manager of Reuters Ltd., for permission to reproduce two historical documents—the logs of Van Ryneveld and Brand.

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DOWN AFRICA'S SKYWAYS

I

VAN RYNEVELD AND BRAND

Start of African Air Adventures—About the Pioneers—The *Times* Vickers Vimy—A Continent's Perils—Cannibals and Pygmies—“Don't Know Where the Hell We Are”—Unkind Fate—Bumped to Beggary—Over the Nile—Crippled Engines—Panic—Crash at Tabora—Thrills Over the Apennines—Lost in the Night—Lashed by Storms—Ups and Downs—Dust Devils—Wrecked at Bulawayo—Success—First London-Cape Air Mail—Vimy Saloon Bar—And *Silver Queen* Grain Bins—Van Ryneveld at Home—A News Item Annoys Him.

THE Cairo-to-Cape air route was surveyed in 1917 and, on completion of the landing grounds, declared open by the British Air Ministry in September of that year. Almost at once five aeroplanes soared into the unmapped skyways to blaze the trail down “Darkest Africa.” Of all the pioneering airmen, only two reached their goal—Lieutenant-Colonel H. A. Van Ryneveld, D.S.O., M.C., and Flight Lieutenant Quintin Brand—and even they had to abandon their machines twice before reaching Cape Town.

Their achievement set a worthy seal on many gallant deeds accomplished as members of the Royal Air Force in the World War. Lieutenant-Colonel Van Ryneveld—dare-devil aviator at twenty-five years of age in Egypt, France, Palestine and Salonica; mentioned six times in despatches; holder of the Order of Leopold of Belgium; the Croix de Guerre and Legion of Honour—had the distinction of being

one of the youngest colonels in the Royal Air Force.

Many of his thrilling air battles with the enemy, his hairbreadth escapes from death and skilful command, will probably never be told in detail. Colonel Van Ryneveld shuns publicity, and it is, perhaps, too much to expect that he will write his war memoirs. They would provide a narrative as romantic as any fiction.

He was born on May 2, 1891, in the Orange Free State, the son of Mr. D. J. Van Ryneveld, J.P. Educated first at Grey College in Bloemfontein, and later at the Imperial College, University of London, Van Ryneveld gained the B.A. degree (Cape University) and also his B.Sc. at the University of London, in 1914. He was commissioned in the Loyal North Lancashire Regiment on September 2, 1914, and transferred to the R.F.C. in April 1915.

Flight Lieutenant Brand was twenty-seven years of age at the time of the flight. Born at Beaconsfield, a suburb of Kimberley, on May 25, 1893, he was the son of one-time Inspector E. C. J. Brand, of the Johannesburg C.I.D., and a grand-nephew of the late Sir John Brand.

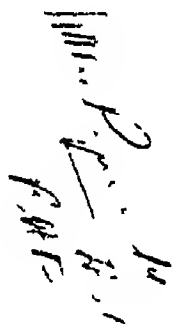
He had just turned twenty-one when he joined up in 1914 and, like Van Ryneveld, met with considerable success in the Air Force. He was mentioned in despatches and gained the D.S.O., M.C. and D.F.C. One of his outstanding feats occurred towards the end of the war, when he attacked and destroyed a German Gotha in the last desperate raid over England. It was a grim air battle with death the penalty of defeat.

Van Ryneveld and Brand were acclaimed national heroes in South Africa. They were fêted and knighted. At a luncheon given in their honour in the Union Houses of Parliament, the then Prime Minister, General I. C. Smuts, announced that his



• SIR PIRRI VAN RUYVELD (GENL) AND GENLAL BRINK SI GELIANY ION DII'ŊŊŊŊ (GENL) •

17/3/20	8pt	Luadara 10	6:30 AM	Luadara	9:15 AM	2h 45
		Sinawa	10:40		11:5 AM	25
18/3/20	"	Polopon	1:30 pm	Polopon	4:35 pm	3 5
18/3/20	"	Pulawa	4:10 pm	Pulawa	4:35 pm	25
17/3/20	"	P'namuakung	7:5 AM	P'namuakung	9:40 AM	2 30
20/3/20	"	P'namuakung	6:35 AM	P'namuakung	10:10 AM	3-35
	"	Kanung M'atid	12:10 PM	Kanung M'atid	4 pm	3 50


 P. M. F.

Total Time = 109 km 30

11/03/20
 P. M. F.

A REGISTER OF THE LOG OF AN RAINYFIELD AND BRIND ON THE EAST PAP...

Government had decided to divide a prize of £5000 between them. Colonel Van Ryneveld was, in addition, appointed head of the South African Air Force with the title of Director of Air Services, at an age when most men are battling hard for far inferior positions. It proved a wise choice. But of Van Ryneveld and his deeds, more anon. . . .

I intend to deal first with the other pioneers who were unable to shake off a hundred misfortunes and gather for themselves the glory of the two South African pilots. The most carefully planned and prepared flight was the Vickers Vimy, originated by the late Lord Northcliffe, a man of vision after the heart of Rhodes, and financed by the London *Times*. The other attempts by an Airco machine, a Handley Page and an Air Force machine from Cairo, all helped to put Africa on the air map, but can be dismissed here with a word of tribute to the gallantry of their crews.

The *Times* Vickers Vimy, designed by Mr. R. K. Pierson, left Brooklands on January 24, 1920. It was the commercial aeroplane type adapted from the Vimy bomber for peace service, with the exception of the body.

Sir John Alcock and Sir A. W. Brown used a similar machine for their 1919 flight across the Atlantic, and Captain Sir Ross M. Smith and his brother for their flight to Australia. It had two Rolls-Royce "Eagle" engines of 350 h.p. each, producing a cruising speed of 85 to 90 miles an hour. The crew consisted of Captain S. Cockerell, Captain F. C. Broome, D.F.C. (pilots), Sergeant-Major James Wyatt (mechanic), Mr. C. Corby (rigger) and Dr. Peter Chalmers-Mitchell, C.B.E., D.Sc., LL.D., F.R.S., of the staff of The *Times*, who was to join the expedition at Cairo and record the progress made along the virgin route. Dr. Mitchell carried an autograph letter from the King to the Governor-General in South Africa, Lord Buxton, and was to make scientific observations *en route*.

The great air adventure gripped the imagination of the world. From Cairo to Cape Town, a distance of 5,206 miles, there were countless swamps and unexplored crocodile-infested rivers; cannibals and pygmies; wild beasts and insect pests; endless undergrowth with a hundred hidden dangers; fever-racked spots and jungleland. The least divergence from the course, or an unchecked leak of petrol, might have made necessary a descent in the dominions of a cannibal king or a village of mysterious dwarfs. Perhaps landings would take place on an island lapped by a fierce river; or in a swamp alive with repulsive and underfed mammals; or again in one of those places described by Sir H. Rider Haggard in his famous stories of Africa.

Above Kosti, some 175 miles from Khartoum, there was the country of the Nilotic negroes. Dinkas, many of whom are of unusually large physique, lived to the east of the Nile. They were known as a people of uncertain temper who often wore their hair cut to resemble a cock's comb, and bleached it with dung.

At Kaka, nearly 400 miles south of Khartoum, were the villages of the Shilluks who had their headquarters near the tactfully renamed Kodok, and cultivated "dura" in the intervals of the chase.

Then there was the Sudd area, where masses of water plants and papyrus formed floating islands, eager (if allowed to remain stationary for any length of time), to root themselves to the bottom of the river and choke the channels, to the utter bewilderment of navigators. Sometimes these floating islands were known to be of sufficient thickness to support the weight of man or hippopotamus. At others, they opened and engulfed the wanderer, who could neither walk upon, nor swim through, them.

From Jinja, the Vickers Vimy was to fly east of Victoria Nyanza by way of Kisumu to Mwanza. This diversion from the more direct western line was considered advisable in order to avoid the area of

active volcanoes lying along the Congo-Uganda boundary. Volcanoes were likely to cause atmospheric disturbances. These in turn, it was feared, might necessitate a forced landing among cannibals in forest country, where even scientific observers would be overwhelmed by flora and fauna. The snarling of jackals and the roaring of man-eaters might take the place of London's rumbling shrieking traffic, and maddening heat, instead of fog and sleet, torment the little crew. They were taking their lives precariously in their hands. But if the thought of failure and its attendant perils entered their minds, their sangfroid and cheeriness showed they recked little of it.

The *Times* had undertaken a great task for the good of mankind. Europe was trying to recover from a ruinous war. She was sick of strife and pillage. Here was a flight which aimed at linking up the continents, not for the purpose of conducting greater wars in the future, but to promote trade and goodwill.

II

Modestly the Vickers Vimy slipped off from Brooklands on her journey down Africa's skyways. A bitterly cold morning, that 24th of January, 1920. But it was weather that the crew thought fondly of under the burning skies of Africa three weeks later.

London wore its wintry mantle of mist. Low clouds overhung the English country-side. The Vickers Vimy sailed at 75 miles an hour westwards over a vast cloud world weird in outline. Her crew peered down for a last fleeting glimpse of well-known landmarks. So bad was the visibility the first day, that the crossing of the Channel to Lyons was considered impossible, and the first halt was made at Manston, near Ramsgate. The next morning, January 25, the weather was better and the pilots headed for France. But after Boulogne they again

encountered mists, and at 11.50 a.m. the pilots reported cryptically and ruefully in their logs: "Seen no ground since Beauvais. Don't know where the hell we are, but steering 12 degrees on compass; can't even get a view of anything to correct drift. Wyatt asleep."

Lyons, after a bitterly cold trip, however, was made at 4.20 in the afternoon, in the total flying time of 7 hours 20 minutes. The route then lay across the Alps to Rome, but as again the weather did not promise a safe crossing, the Vickers Vimy's nose was turned towards Istres. Then followed more rough buffeting in the air.

Here is a breezy account of the crew's experiences from Lyons to Istres, as set down by the pilots in their log.

January 26.—10.40. Sticky take off. (God help the poor sailors on a day like this.) Wind against us, about 50 m.p.h. at 2,000 feet. Route lay across Alps, but only mountains near us visible, remainder covered in clouds, so decided to change course and follow the Rhone to Istres.

11.40. Lyons aerodrome still visible under our tail, only done about 20 miles (bumped to beggary!). Wyatt and Corby hanging on to arms of chairs. Worse stuff ahead.

12. (Thank God we've got a Navy and Vimy's float.) Rain falling out of sky. (Hope we're getting near South of France; someone said it was sunny.) Chased down valley at 800 feet; hills about 3,000 feet on each side. Hardly making any headway. Country very pretty, but tired of looking at same spot for hours on end. Had coffee from Thermos and broke "Iron Ration" and started on "Biscuits." Topping, felt much better!

1 p.m. Weather improving but showery, country very much like N. Spain. Glad we didn't cross Alps, clouds down to 500 feet all round them.

1.30. Rhone developing into sea, getting thoroughly fed up and bumps starting again. Taking short

intervals each and machine hardly controllable. Expect to be blown back to Weybridge any moment.

1.45. Spotted Istres (about 25 miles from Marseilles) in distance, decided to land.

2.20. The largest aerodrome we've ever seen. Flew for 20 minutes before we reached hangars, landed like a bird. French very good to us, took us straight to their Mess!

Vimy and engines, etc., O.K.

January 26.—Arrived Istres; weather dud, strong headwind, leaving dawn to-morrow for Rome. Inform Weybridge Petrol System excellent—Cock, Broome.

The next day the party landed at Rome; the next at Malta, and then came a flight across the Mediterranean to Tripoli through storms and terrifying lightning. Another three stages along the north coast of Africa and the flight down the continent would begin. Benghazi on February 1; Sollum on February 2; Cairo on February 3. The eyes of the whole world were fixed on the pioneers. Even in the dorps and far-flung streetless outposts of Africa, people thirsted for the latest news of the Vimy's progress.

Crowds waited outside newspaper offices. Harassed reporters answered countless telephone inquiries. In many South African towns, enterprising business houses arranged to receive telegrams of the aeroplane's movements from stage to stage. The tidings were communicated to home-going clerks, typists, business men, and multitudes of schoolboys, by telegraphed information gummed to the doors and windows of the shops. General dealers placed maps in their display-windows close to priced wedding cakes, Parisian frocks, silk hose, water pistols and the latest fancy shirts.

The distances traversed were shown by pinning paper butterflies with the date, opposite stopping places. Even school-children, who did not gaze at

the maps and water-pistols, had to follow the flight during geography lessons. Maps of Europe and Africa were spread over their desks and the air route traced out by pencil with or without the guidance of the teacher—a splendid way of introducing romance into the usually dull study of geography.

In those days, it must be remembered, aeroplanes were rarely seen in South Africa. Not yet had people been awakened before dawn by the warming up of aeroplane engines with a vigour putting a bad jazz orchestra to shame. In many centres a throb and a roar in the sky would cause townfolk to mass in the streets and watch with bated breath, the aerial gyrations. Imagine then the excitement caused by a pioneer flight from England to the Cape, when for almost 300 years men had been satisfied to travel by sailing vessel and steamship!

And then, fired no doubt by the enthusiasm of the great aviation age, and the thought of the glittering pages of history they might contribute to the annals of South Africa, Lieutenant-Colonel Van Ryneveld and Flight Lieutenant Brand, set off in pursuit. Their attempt was made possible by General Smuts, and the Union High Commissioner in London. The order for an aeroplane named the *Silver Queen*, was given to Messrs. Vickers, who set to work to install the machine with the special fittings required to equip her for the severe conditions she was to experience.

The Vickers Vimy had barely landed in Cairo when the two young pilots raced the *Silver Queen* across the Brooklands Aerodrome on February 4, into a bleak and drizzly dawn, on yet another air adventure over Africa. They turned her nose towards Paris and the unconquered dark continent, to the sunny land of their birth. For the moment we will leave the *Silver Queen* humming through the clouds, over mountains at a height of 12,500 feet, and let her land at Turin. . . .

III

It is 9.45 in the morning of February 6, 1920. Huge crowds of fezzed Egyptians and white-tuniced Europeans are assembled at the aerodrome in Cairo, to watch a mechanical petrol-driven bird start on its conquest of desert, swamp and impenetrable jungle. How the Egyptians astride their lumbering camels, and lolling in their flat-bottomed boats on the Nile wonder at the droning winged form above! The course is steered over the pyramids towards Luxor, but trouble soon begins. As the machine soars through the scorching air, the port engine becomes overheated and at Luxor the cylinder jacket is found to be leaking. Nearly all the water has dripped away. Then follows a wearisome flight to Khartoum.

There is more engine trouble, torrid heat. Nerves are on edge. Volcanoes are struck 200 miles west of Atbara. By February 10, the Vickers Vimy has reached Jebelain. The engine still spouts water, and repairs have to be undertaken. Consultations are held while mechanics tinker with the cylinders. Should the flight be continued or new cylinders obtained? They decide to push on, but it is virtually the beginning of the end.

Courageous though the pioneers were, they would probably have decided upon some other course, could they have foreseen the hardships they were to endure. For many dark days they limped along with a crippled engine. They learnt how precious water is—they who had never lived in an arid, waterless land. Africa takes toll of those who would conquer her desolation!

On to Malakal, and then by compass to Mongalla. Would they ever get there? Here is the diarised tale of their hardships:

February 14.—Left Jebelain 7.40 a.m. with a following wind. Make Malakal, distance of 215 miles

in 2 hours 10 minutes. Headed for Mongalla, flying by the compass. Visibility very bad, due to bush fires and haze over Sudd. Impossible to pick up landmarks. Nile was missed in swamps. Picked up Amardi-Tombi telegraph line in jungle. Having pumped 16 gallons of water into tanks, found none left. Searched for landing ground and found small burnt patch in dense jungle. Landed 1.15 p.m. Heat on ground terrific. Expected hostile natives but kept in bush so as to be invisible. Needed more water badly, but none was available. Decided only hope was to find water and land. Took off at 3.25. Spotted creek and water and landed on another small patch of burnt grass, very rough surface, at 3.30. Natives quite friendly. Fetched water. Heat caused rapid evaporation of petrol. More temporary repairs to cylinders. Just staggered off ground at 5 p.m. After 20 minutes flying, petrol in main tanks exhausted. Made for Nile panic-stricken. After 10 minutes could see no opening in jungle anywhere. Another 50 minutes and spotted Nile. Landed on edge of lake, dodging trees and anthills at 6 p.m. It was by that time dark. Despatched Native runner to Mongalla for petrol. Slept on planes of machine on account of crocodiles.

February 15.—Dawn. No assistance yet. Doctor and Broome set off with guide on 15-mile tramp through jungle and elephant grass. Took 6 hours. Fifty gallons of petrol arrived at noon by camel with Captain Worseley, D.S.O. Machine got away at 3.20 after terrible take-off. Landed Mongalla at 3.30 p.m. Four cylinders leaking. . . .

So it went on day after day, one hardship treading on the heels of another, with an exultant, almost impatient ferocity. For four days Wyatt and Corby, the mechanics, laboured with the repairs in the sweltering heat. Unutterably fatigued, they kept doggedly on. Once more the machine was pronounced airworthy.

February 20 started what was to be the most disastrous week of the flight. More engine trouble. Tyres punctured. Armature burnt out. Bad petrol. Tropical heat. Disturbed by lions. All the Fates seemed to join in a determined conspiracy to impede the plucky band.

New engines were to be obtained at Kisumu. From there, thought the optimists, the pioneers would be able to tackle the remainder of the route with some chance of success. But it was not to be. There was another disappointment in store for them. The engines on which all their hopes had rested, were destroyed on board a burning ship and lay useless at the bottom of the sea. Even that did not altogether deter them. Nothing less than the wrecking of the plane would make them abandon their flight. Overhauling continued until they pushed on to Mwanza and Tabora. All spare kit was abandoned. It was just after taking off from Tabora for Abercorn, that the final straw broke their unyielding backs. Here is the swan-song of the party :

February 27.—"Took off at 6.50 a.m. Rush of water from starboard engines worse than ever before and were compelled to land immediately. Returned to aerodrome 7.5 a.m. Stopped leak with red lead and asbestos string. Fresh start made 2 p.m. Just got off ground when starboard engine 'concked' completely. Only hope was to switch off and run into bush. Undercarriages of machine struck anthills, front wheels being carried away, but managed to save aeroplane from turning over. Machine badly damaged and strained. On investigation it was found that water was leaking into induction and exhaust pipes internally, also oily substances in petrol."

The Vickers Vimy which set out on its great task lay stricken like some giant bird in death agony. . . .

Crowds were still gathering outside the South African newspaper offices and shops daily to follow

the grim struggle against ill-fortune. It became almost a byword to ask, "What's wrong with the Vimy now?" The newspapers told an avid public that the flight was at an end, and the shopkeepers marked "crashed; given up," on the Vickers Vimy paper butterfly and pinned it on Tabora. Everybody seemed to feel a personal disappointment. It was as though a ship heading for an island to rescue a marooned party, had foundered on the horizon, and the link with civilisation was not yet. But disappointment soon gave way to sympathy, and sympathy to admiration.

It was cruel luck. The first pioneers had failed to reach the Cape. Yet not altogether failed. They had pointed the way for others. Van Ryneveld, Cobham, Bentley, Murdoch, Caspareuthus, Kidston, of honoured memory, were all to carry on their great effort at breaking down boundaries and linking up the ends of the earth. In twelve years' time Imperial Airways would be advertising regular trips between Cape Town and London. The swamps and bush country would no longer hold any terrors.

This is the summary of the Vickers Vimy flight in the words of the pilots, Cockerell and Broome :

"Throughout the whole trip, no trouble of any description was experienced from the aeroplane itself. We can only conclude that climatic conditions or some other cause affected the engines. Aerodromes at high altitudes are rather small for large machines, but all are well kept with good surfaces. Large herds of elephants, hippopotami and other game were observed from the air along the route. It was impossible to take photographs at low altitudes owing to the bad condition of the engines. We are all disgusted with our bad luck. Nothing would please us more than for the same party to try again, notwithstanding discomforts and disappointment. The greatest possible assistance was given all along by military, R.A.F., civilians and natives."

We look from the wreckage of the Vickers Vimy into the vast African skies for other trail blazers to follow. They are hot upon the track.

IV

We left Van Ryneveld and Brand at Turin at 5.10 on the afternoon of February 4. While we have been following the fortunes, or rather misfortunes, of the Vickers Vimy, they have flown grimly on. Even as we see the last crash at Tabora, the *Silver Queen* has left Kisumu for Abercorn. . . .

Let us trace their exploits to the Cape from Turin. Engine trouble began early. No sleep for Van Ryneveld and Brand the first night. The radiator of the port engine was leaking badly and the hours for sleep and rest were spent in taking the radiator down and soldering it up. It was only at 11.30 on the morning of February 5 that they circled Turin and pushed on to Rome. At four o'clock they reached the Italian capital but instead of landing, made for Foggia in the teeth of a strong headwind.

It was useless, they soon learnt, to carry on a battle with the elements, and as evening was coming on, the *Silver Queen* returned to Rome.

Before the pilots reached the African coast, they were to have some startling experiences. They took off from Rome the next morning and crossed the Apennines. While flying the mountains it seemed to them as, though some mighty power had taken gravitation by the scruff of the neck and upset the whole of Newton's theory. Suddenly, for no rhyme or reason, the *Silver Queen* would drop about 600 feet, and then, be buoyed up to an equal height again. The aeroplane was like a toy hitched by an invisible cord to the sky, and kept dangling helplessly in the atmosphere. It was a most disconcerting experience, and terra firma at Gioja del Colle was doubly welcome. But no sooner was danger safely

averted, than it was forgotten and the next lap contemplated.

From Gioja to Sollum on the African coast—by dark. Would anybody who prized his safety, have ventured into the night across the Mediterranean? But Van Ryneveld and Brand put little store by safety. Their business was to get on with the flight, to land at the Cape. The tanks were filled, and at 9.30 p.m. the *Silver Queen* raced across the aerodrome to accomplish a nightmare feat still noteworthy in the conquest of the air.

Their passage soon became bumpy. The sea surged and broiled far beneath them, lashing itself into a fury of white-crested waves. Into a storm and a tearing wind they plunged, groping blindly for their bearings as the wind blew them backwards. The island of Zante was sighted. On, on, on, the only man-made thing in the whole of the vast and menacing universe.

Wearily the pilots changed over at four o'clock in the morning. Van Ryneveld struck himself in the face with his gloves to keep awake. Tommy Rose in 1931 used a more violent sleep-dispeller—a sail-maker's needle. Into Brand's drooping face Van Ryneveld flashed a blinding torchlight to keep him awake. Petrol was diminishing. Would the night never end? A second storm came to batter them. Masses of cloud like the basins of mighty extinct volcanoes assailed them. Up, up, up they climbed through never-ending wetness to 9,000 feet.

Their undercarriage skimmed the clouds. On they cruised until it was near dawn. The most wonderful dawn since the Creation, was about to break, thought the aviators. Through gaps in the clouds they descended, hoping to glimpse the African coast. There was no sign of it. Just endless heaving ocean. Desolation. If they continued in a southerly direction they knew they must sight land. But not for another one and a half hours, of which every

minute seemed a day, did they spy the coast—only mirages which beckoned invitingly to them, and then mockingly melted away into nothingness.

The *Silver Queen* with her leaden-eyed pilots, tottered through more pelting rain. On and on. Had Africa receded, been swallowed up by a volcano? The elements were unyielding. Terrifying. They were hours overdue. Petrol supplies were getting perilously low. At long last the coastline of Utopia hove into sight. . . . The *Silver Queen* sank to rest like a weary bird in the desert at Derna. It was 8.30 in the morning.

Sufficient petrol for a few hours' flying was found in the tanks, and at 9.30 the *Silver Queen* hummed for Sollum. She bumped over the stony Sollum aerodrome later in the day, and the tail-skid was wrenched away. The *Silver Queen* was being repaired at Sollum while the Vickers Vimy struggled on its tortuous and troublesome course at Khartoum.

On February 9, Van Ryneveld and Brand moved off once more in rainy weather. To keep check of their whereabouts as they cut through the threatening skies, they used as a guide the white line of surf hurling itself against the ragged coastline of Northern Africa. Between Alexandria and Cairo, however, the weather cleared. They flew on until at about eight o'clock in the evening when they spied the lights of the Egyptian capital twinkling beneath them. With the aid of flares, which gave them an indication of the lie of the aerodrome, they landed.

Once again Van Ryneveld and Brand left by night. At 11.30 p.m. on February 10 they flew into the dark southern skies. The Cairo-to-Cape flight proper had begun. The Vickers Vimy expedition at that hour was camping round a fire in the heart of the bush country with sentries on guard against the curiosity of prowling wild beasts. What the authors of boys' thrillers usually wrote about, the pioneers were

actually experiencing! Then the Fates which had made such sport of the Vickers Vimy seemed to turn back awhile, and amuse themselves by playing havoc with the *Silver Queen*.

At first a good wind followed her from Cairo. All went well until five o'clock in the morning, and the pilots were lulled into a state of security. Then it was noticed with alarm that the thermometer on the starboard engine had jumped to 100 degrees—and stayed there. A torch was flashed on the engine. The tap on top of the radiator had turned full on and the last few wisps of steam were shooting out. They had discovered their peril only just in time.

The engine was almost ready to “seize up” in the air. A little longer ignorance of the trouble and the flight might have ended in disaster instead of triumph. They had to land at once. Not a moment was to be lost as the nearest landing ground was 50 miles distant. They could not possibly have reached it.

This is what Colonel Van Ryneveld said of it afterwards: “By the mercy of Heaven we happened to land on the only open patch of sand among the hills. Then, unfortunately, after landing and running along the ground for fifty yards, we ran into a heap of boulders which we could not see. This damaged the machine beyond repair. It was a mixture of good and evil fortune, for the patch of sand lies between a river and a line of very rough kopjes . . . and with a little more luck the boulders would have been avoided altogether and the machine none the worse.

“As it was the engines were undamaged, and on General Smuts agreeing at once to another machine being placed at our disposal, we set to work to dismantle them, together with the special fittings necessary for the type of flight, and to take them down to Assouan.”

While the airmen were busy dismantling the engines Lord Allenby passed by on the Nile and sent them a basket of provisions. This kept them going

for three days, after which the engines were conveyed by rail from Assouan to Cairo. Undismayed, Van Ryneveld and Brand returned to Cairo on February 16. While the R.A.F. headquarters assisted to hasten the resumption of the flight, the shopkeepers pinned a *Silver Queen* butterfly back at Cairo and moved the Vickers Vimy one slowly along its misfortune-stricken southward path.

The Rolls-Royce engines were thoroughly tested and found to be in such excellent condition, that it was decided to use them in what was to be known throughout the world as the *Silver Queen II*. Mechanics, grimy and oil bespattered, worked day and night.

Cairo was left for a second time early on the morning of February 22. The pilots hoped to make Khartoum the same day, but the time of departure was ill-chosen. The first headwind which had blown for two months in that region, sprang up. Nine and a half hours later found the *Silver Queen II* bowing inevitably to the elements, as in Italy, and landing at Wadi Halfa at 3.50 in the afternoon.

Khartoum was reached under cover of nightfall on February 23. And then the same engine trouble that had hindered the Vickers Vimy, began. Leaks started in the water jackets of the engines, and a day had to be spent changing the cylinders. Thinking that he might overtake the *Times* machine, and be able to render assistance, Van Ryneveld stored a number of these cylinders on the *Silver Queen II*. The lap from Khartoum to Mongalla was completed on February 25.

It was during this Khartoum-Mongalla flight from 6.55 a.m. to 3.55 p.m. that the *Silver Queen II* engine behaved in an extraordinary manner, and gave her crew moments as anxious as they had known over the Apennines and the stormy Mediterranean. The country consisted largely of stretches of burnt and unburnt grass, and the effect of this upon the

atmosphere was alarming. The *Silver Queen II* would suddenly sag sickeningly 1,500 feet in a minute, right itself, fly on evenly, and then fall like a log another 2,000 feet through space. The sky seemed interwoven with pockets of dead and electrically charged air. When the plane took a dizzy plunge and the earth came up to meet it, the airmen began to wonder if they would reach the landing ground alive, or in a whole aeroplane. Skilful pilots though they were, they could not cope with the puckish vagaries of Nature.

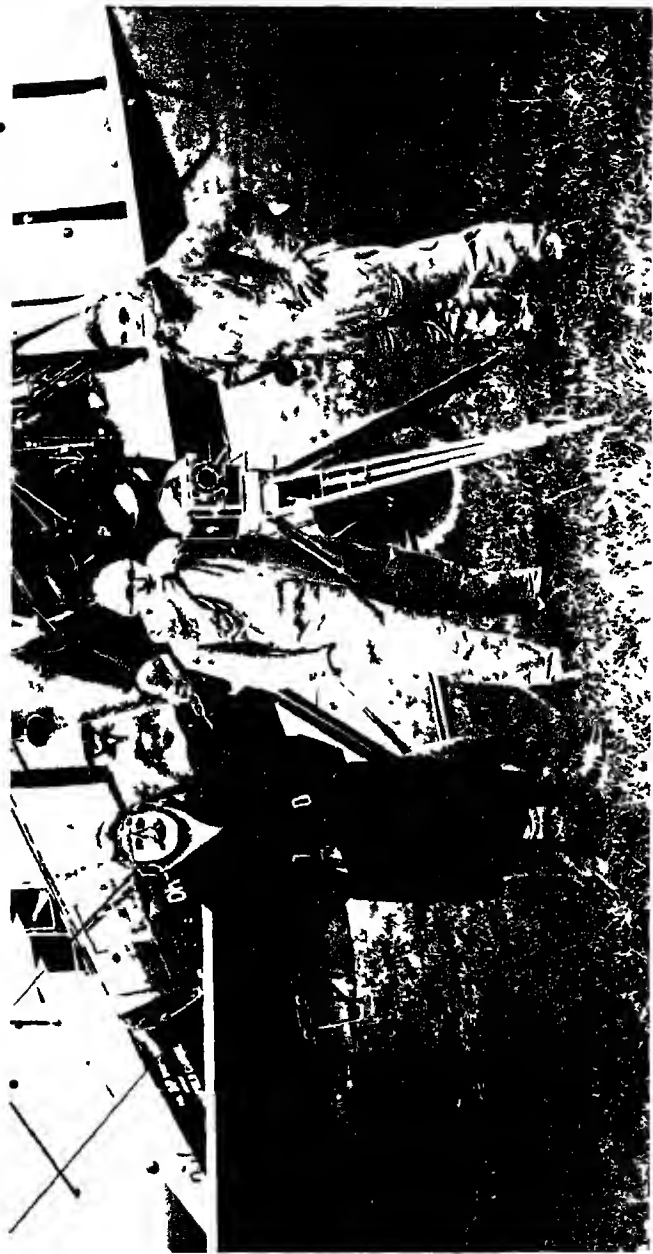
It was a relief to see Mongalla loom up ahead. One more peril was to be left behind,—but not quite. In accordance with their customary practice they came down low and skimmed over the aerodrome to examine the ground surface. Bounding up into the sky again before landing, they discovered that when the engines were switched on, only half the cylinders were working. It was a result of the great heat. Instead of soaring high into the sky, the *Silver Queen II* limped weakly along on half her cylinders, staggered over the bush, and scraping the tree tops, by a miracle avoided a second crash.

Luck for once was with the pilots! After eight hours in the air the load of fuel had been considerably lightened and the aeroplane managed to dip to earth—intact.

v

At 6.30 the next morning the lap of seven hours from Mongalla to Kisumu was begun. On the way Africa's "dust devils" made their appearance. The airmen saw before them dense columns of dust stretching from the earth to a height of 8,000 feet. . . .

The *Silver Queen II* at last began to overhaul the Vickers Vimy. From Kisumu to Abercorn she speeded, but not uneventfully. The effect of the extraordinary climatic conditions on the engines



SIR ALAN COBHAM, MR. B. J. HOFF, CINEMATOGRAPHER, AND MR. A. B. J. HOFF, ENGINEER, READY FOR THE DUPEKAL AIRWAY SURVIVAL FLIGHT FROM LONDON TO CAPT. TOWN



LADY BAILEY, AFRICA'S GREATEST WOMAN PIONEER

caused a forced landing at Shirati and another 24 hours were spent on the engines. While the crew perspired in their overalls with bolts and cylinders, the natives of the district brought propitiatory offerings of sheep, kids, chickens, eggs and milk. They gaped in wonder at the white-faced birdmen and their sky-machine! From Shirati Van Ryneveld decided to push right on to Abercorn, 663 miles from Kisumu and 280 miles past Tabora.

It was a long flight and took a little over eight hours. A look-out was kept for the Vickers Vimy but nothing was seen of it, though the wreckage lay in the bush close to Tabora. At Abercorn, the *Silver Queen II* was just over half the distance from Cairo to the Cape; and here it was decided to discard every bit of equipment which was not indispensable.

On the way to N'Dola a defect again arose in one of the engines. The petrol supply to one block of three cylinders, it seems, was completely cut off owing to the jet stripping its screw-thread and shutting home on its seat. And so the machine gradually lost height while passing over dense African bush. After a while, however, a level course was maintained for the cargo was light, and at noon a landing was made at N'Dola—1,957 miles from the Cape.

Except for difficulty in taking off several aerodromes sodden with rain, the *Silver Queen II* flew triumphantly on from N'Dola to Broken Hill, and thence to Livingstone, which was reached on March 5. Apparently all serious trials were over. The South African towns on the route to be taken by the *Silver Queen II*, planned receptions and addresses of welcome. But the *Silver Queen II*, alas! was doomed when almost at the pinnacle of success. Heavily laden she rose from the Bulawayo aerodrome and made towards a low line of hills. In the leeward of these she failed to climb in a dead patch of air, and with the soil of South Africa almost in sight, sank into the bush and was completely wrecked.

Once more the Union Government enabled the pioneers to struggle on by sending an aeroplane called the *Voortrekker* to Bulawayo. A second and successful start was made from there on March 17. The *Voortrekker* flew southward. Serowe, Palapye Road—1,144 miles to the Cape. Through a rainstorm at Nylstroom which chipped the propeller and tore off the binding. Pretoria, the administrative capital. Johannesburg, the Golden City. Crowds mad with enthusiasm. A world looked on in admiration. Bloemfontein in the Orange Free State. Beaufort West in the Karoo—277 miles to the Cape. Through cloud-capped mountains in the Western Province. A battle with strong air currents. Worcester sighted through the clouds. The railway line near Kraaifontein. Cape Town at four o'clock on that unforgettable afternoon of March 20, 1920. Surging crowds cheering wildly. Two South Africans born and bred had been the first to conquer the unmapped skyway and its many perils.

With them the airmen brought the first aerial mail from London to the Cape. The letters were addressed to the Prime Minister of South Africa, and were from Mr. Lloyd George, Prime Minister of Great Britain, Mr. Winston Churchill, Major-General Sir F. H. Sykes, Controller-General of Civil Aviation, and Colonel L. M. S. Amery, Parliamentary Under-Secretary for the Colonies. Dated February 3, 1920, from 10 Downing Street, Mr. Lloyd George's letter to General Smuts read :

“ MY DEAR GENERAL,

I am told that two gallant South African officers, Colonel Van Ryneveld and Flight Lieutenant Brand, are about to start on the pioneer flight to South Africa by the Cape to Cairo route. I am glad to avail myself of this opportunity to send my best wishes to yourself and to South Africa by the first aerial mail. I do not suppose that Cecil Rhodes and

other pioneers of the Cape to Cairo route ever dreamed that the first package to be carried along this route would travel by air and not by rail.

With best wishes,

Yours sincerely,

(Signed) D. LLOYD GEORGE."

The official log of the great flight was as follows :

February 4.—Left Brooklands 7.20 a.m. Landed Turin 5.10 p.m. Time of flight 8 hours 50 minutes.

February 5.—Left Turin 11.30 a.m. Landed Rome 5 p.m. Time of flight 5 hours 30 minutes.

February 6.—Left Rome 10 a.m. Landed Gioja del Colli 1.10 p.m. Time of flight 3 hours 10 minutes.

February 6.—Left Gioja del Colli 9.30 p.m. Landed Derna, February 7, 8.30 a.m. Time of flight 11 hours.

February 7.—Left Derna 9.30 a.m. Landed Sollum 11.30 a.m. Time of flight 2 hours.

February 9.—Left Sollum 3.5 p.m. Landed Cairo 8.25 p.m. Time of flight 5 hours 20 minutes.

February 22.—Left Cairo 6.20 a.m. Landed Wadi Halfa 3.50 p.m. Time of flight 9 hours 30 minutes.

February 23.—Left Wadi Halfa 1.15 p.m. Landed Khartoum 6.55 p.m. Time of flight 5 hours 40 minutes.

February 25.—Left Khartoum 6.55 a.m. Landed Mongalla 3.55 p.m. Time of flight 8 hours 40 minutes.

February 26.—Left Mongalla 6.30 a.m. Landed Kisumu 1.45 p.m. Time of flight 7 hours 15 minutes.

February 27.—Left Kisumu 7 a.m. Landed Shirati 8.20 a.m. Time of flight 1 hour 20 minutes.

February 28.—Left Shirati 6.35 a.m. Landed Abercorn 2.45 p.m. Time of flight 8 hours 10 minutes.

February 29.—Left Abercorn 6.55 a.m. Landed N'Dola 12.5 p.m. Time of flight 5 hours 10 minutes.

March 2.—Left N'Dola 6.10 a.m. Landed Broken Hill 7.40 a.m. Time of flight 1 hour 30 minutes.

March 2.—Left Broken Hill 10.15 a.m. Landed Livingstone 2.45 p.m. Time of flight 4 hours 30 minutes.

March 5.—Left Livingstone 8.30 a.m. Landed Bulawayo 12.45 p.m. Time of flight 4 hours 15 minutes.

March 17.—Left Bulawayo 6.30 a.m. Landed Serowe 9.15 a.m. Time of flight 2 hours 45 minutes.

March 17.—Left Serowe 10.40 a.m. Landed Palapye 11.15 a.m. Time of flight 35 minutes.

March 17.—Left Palapye 1.30 p.m. Landed Pretoria 4.35 p.m. Time of flight 3 hours 5 minutes.

March 18.—Left Pretoria 4.10 p.m. Landed Johannesburg 4.35 p.m. Time of flight 25 minutes.

March 19.—Left Johannesburg 7.5 a.m. Landed Bloemfontein 9.40 a.m. Time of flight 2 hours 35 minutes.

March 20.—Left Bloemfontein 6.35 a.m. Landed Beaufort West 10.10 a.m. Time of flight 3 hours 35 minutes.

March 20.—Left Beaufort West 12.10 p.m. Landed Cape Town 4 p.m. Time of flight 3 hours 50 minutes.

Total flying time 109 hours 30 minutes. (The delays are not mentioned in the log.)

VI

You might ask what became of the wrecks of the *Times* Vickers Vimy at Tabora and the *Silver Queen II* (outside Bulawayo). Were the pieces of wreckage carefully rescued and housed in national museums? or were they contemptuously flung on the scrap-heap? Neither. They were put to far stranger uses. While Broome and Cockerell journeyed on to the Union, their plane lay in the jungle until some settlers, of an inventive turn of mind, found themselves in need of a club building. They made the fuselage into a neat saloon bar and the undamaged wings formed a cool verandah. So much for romance!

Even stranger is the history of the *Silver Queen II* after the crash at Bulawayo. One of the spectators who saw the plane disappear suddenly, dashed in pursuit through the bush and stumbled over a propeller blade. That relic now decorates—or did decorate until a couple of years ago—the gateway to a Bulawayo poultry farm named the “Silver Queen Farm.” The petrol tanks of the *Silver Queen II* were used as bins for grain for the poultry. The great tail-piece and rudder practically intact, were hung from the roof of the Bulawayo Drill Hall.

Equally unusual was the fate of the Belgian aeroplanes which were wrecked just after the war while carrying mails between Kinshasa and Stanleyville. In a little river-side village along the Congo borders are the graves of two of the aviators marked with propellers. Close by a visitor once found a ju-ju house where a witch doctor made magic with queer charms. The instrument board of an old plane was given a place of honour in the hut, and the altimeter, pressure gauges and compass were regarded as objects of veneration by the Congo savages.

It is to be regretted that South Africa is unable to exhibit in her museums portions of the historic *Silver Queen II*. Bleriot's cross-Channel plane, I

believe, is now in a Paris museum; the Wright Brothers' machine—the first aeroplane to fly—is in the Smithsonian Institute, U.S.A.; the England-Australia machine of Ross and Keith Smith is treasured in Melbourne, and in the Science Museum, South Kensington, is to be seen A. V. Roe's triplane, the first British aeroplane.

Now let us turn from the *Silver Queen II* grain bins and farm gateways, the cheering crowds, the welcoming speeches of General Smuts, and the glowing newspaper tributes, and pay a brief visit to the domain over which Colonel Sir Pierre Van Ryneveld now holds sway. Picture a vast expanse of beautiful green sward; the smoke of a train in the far distance; a squad of silver-winged aeroplanes overhead looping the loop, swooping like birds of prey, and suddenly rushing heavenwards again; mechanics in oily overalls hammering away at propellers, cylinders and spare parts in huge hangars.

This is the Zwartkop Aerodrome, headquarters of the Union Air Force, and in the background is Roberts Heights, a sort of military village with its hospital, military college, streets of houses and 2,000, or 3,000 souls.

It was shortly before Van Ryneveld's pioneering flight that the South African Government decided to establish an air force; but it is doubtful if anything would have eventuated if the Imperial Government had not come forward with a generous gift of 100 aeroplanes complete with spares and equipment. By the end of 1921 there had been assembled at Zwartkop and Roberts Heights these 100 aeroplanes, transport vehicles, workshop lorries, three ton lorries, tenders, trailers and motor-cycles (some of which still rattle bravely over the drome); steel framework for twenty permanent hangars for housing the aeroplanes; wireless equipment; photographic material; 50,000 gallons of special aeroplane oils; 20,000 gallons of paints, varnishes and dopes; tools and

heaps of spares and the complete workshop machinery to enable any kind of overhauling work to be done.

The Union Government Treasury in 1920 could not have stood the financial strain of an air force without the aid of the Imperial Government. It was as well, too, that Roberts Heights was established then, for in 1922 aeroplanes took part in the Rand revolution, and later in operations against rebellious natives in south-west Africa. For ten years Sir Pierre Van Ryneveld has controlled the destinies of the Air Force, and during that time it has proved its use time and again, not only in a militant sense but also in ventures of a peaceful nature. Experiments in aeroplane engines have proved highly successful, and aviation courses have been started for university students in Pretoria. A limited number in perfect physical condition are chosen each year, and divide their time between practical flying in small Avro Avians at first, and theoretical lectures at the university.

This then is the domain to which the Director of South Africa's air services drives early in the mornings, winter and summer, in his Rolls-Royce, a souvenir from the famous motor-car company after the *Silver Queen* flight, and does his daily dozen. He is just over forty years of age, but is still the finest airman in South Africa. Some mornings I have been at Zwartkop and seen a DH 9 going through the most alarming contortions. No need to ask who is at the joy-stick. It's the "Chief" enjoying himself. Some people feel at home in the air. Sir Pierre Van Ryneveld is one of them.

I recall one day in October 1929, standing among a group of officers at the Zwartkop aerodrome when the Chief suddenly appeared out of the sky. He landed in masterly fashion. Six hours ten minutes before, he had breakfasted in the shadow of Table Mountain. He lunched at Roberts Heights. In a

few short hours he had completed a journey which by train takes thirty-six wearisome hours. "Some engine," he remarked, calmly discarding his wrappings and rubbing his ears. A stiff wind had been blowing, but that meant nothing to him.

He has the born airman's uncanny knack of "smelling out" the most favourable air currents. Sir Pierre will tell you that he makes a calculation as to his drift and the magnetic variation. He will then set a course, perhaps away from his objective, but the currents will take him back to it. Even when flying above the clouds, without any landmarks to guide him, he uses this instinct as to direction and the velocity of his drift. His record flight of 850 miles, as the crow flies, from the Cape to Zwartkop was accomplished in a Westland Wapiti aeroplane imported from England, at an average cruising speed of 140 miles an hour. Prior to that he had flown the distance in a trifle over and under seven hours.

Just one final incident about this remarkable airman with the clear-cut young face and semi-bald head. Unknown to him, and perhaps luckily for myself, I was at Zwartkop to see him test the first consignment of parachutes that arrived in South Africa for the use of the Air Force. It was purely by chance that I was at the aerodrome at the time. I had managed to evade the suspicious uniformed native sentry, who challenges all outsiders with broken English and an evil-looking assegai, and passed on to the tarmac—the long strip of concrete running parallel with the hangars.

Overhead an aeroplane sailed proudly along. Then a tiny figure sprang from the back seat. For a moment I thought I was the witness of some terrible tragedy. I half closed my eyes, fearing to see a mangled body on the ground when I opened them again. But no. Out shot a parachute. A miniature figure dangled at the bottom. . . . It was Sir Pierre trying out the parachutes at a height of 2,000 feet

before allowing his men to use them. Slowly and gracefully he sank to earth.

The incident was duly chronicled in the Press, much to the annoyance, I understand, of the parachuter himself. He has a horror of publicity's spotlight and would sooner take a chance in front of a battery of machine-guns than a line of reporters' note-books.

I am afraid he will not follow the example of Sir Alan Cobham and Air Commodore Samson, and describe his thousand aerial thrills. And so if Sir Pierre Van Ryneveld himself does not give us a book to tell his story, I trust that this chapter, however inadequate, will serve at least as a record of his stout-hearted pioneering flight. In these days when Imperial Airways are transporting passengers across Africa's swamps and jungles in luxury planes, you should remember him.

Of Sir Quintin Brand, there is little more to tell. He returned to England after the great flight and assumed a position in the R.A.F. The Air Force list of April 1931 refers to him as a Wing Commander in the R.A.F. Depot at Aboukir, in the Middle East. But for his leaving, Sir Quintin to-day might have been playing his part in developing Africa's airways. South Africa lost a great airman. The R.A.F. gained one.

II

SIR ALAN COBHAM—FIRST FLIGHT

Taximan of the Air—His Greatest Propaganda Trip—Down Africa With a Ready Reckoner—No Black Cats, Please—Those Taranto Cocktails—Over the Pyramids—A Hot Christmas—The Victoria Falls—Escape From Disaster—Racing the Mailboat—To Win a Tie—Sodden Aerodromes—Bogged—Lost in a Sandstorm—A Vicious Promontory—Croydon Again—Audience with the King—Cobham Wins his Bet.

“**T**AXIMAN of the Air,” they called him, this dapper little man, with hair brushed back and carefully-groomed moustache. If you did not know him, you might have taken him for some city broker or business man, who, cooped up in his office, ruled a maze of revolving glass doors, strident telephones, mercurial tape-machines, liveried messengers and shingled typists hammering out (between gossip) reams of “Dear-Sir-I-am-in-receipt-of-your-favour” letters, from morn till eve. To those who knew the “taximan,” the thought of him cramped in an office leading a 9 a.m. to 5 p.m. existence, was ludicrous—impossible.

For him were the unconfined reaches of the air, where speed is king and an unfolding panorama of earth and sky takes the place of telephones and shingled typists. Sir Alan J. Cobham, business-man of the air, was the man who followed Van Ryneveld and Brand down the long sky-route from Croydon to the Cape.

Born on May 6, 1894, Cobham went to the Wilson Grammar School for his education, and at the age of nineteen was engaged in a commercial career in the City. He did not hesitate to throw all personal

considerations aside when the war came. He joined up and served three years in France, receiving a commission. On demobilisation he decided to take up civil aviation as a career and at once showed himself a hustler. In 1919 he carried 10,000 people in aeroplanes.

If there had been no Cobham, Imperial Airways might not have extended their arm of service down the African Continent as early as 1932. Others may, would, have flown down Africa with a stopwatch in their hands; but Cobham kept his eye on a ready-reckoner. He was the man who worked out the pounds, shillings and pence of the African route. On his pioneer work is built the present structure of the Trans-African Airways.

Picture a dull November day at Croydon; to be exact, November 16, 1925. There might very well be a London "particular" brewing to smother and blanket up a disgruntled city. A small crowd is gathered there, muffled up as only those know how, who specialise in seeing visiting or departing airmen. Among the spectators is a huge Alsatian wolfhound, well on the leash. Some of the women carry suspiciously bulky parcels . . . they might contain lucky black cats. And well, they might not. . . . Camera-men manœuvre about with the implements of their trade cocked expectantly. One man keeps watch on cameras that might have been the stock-in-trade of an embryo cinema studio.

Out of the murky sky comes the snorting of engines. An aeroplane gathers shape, coming from the direction of Stag Lane at Edgware. It slopes down to the landing place. It is Sir Alan Cobham, ready to start for Cape Town—"to make a report on the entire route both from a flying point of view, and with regard to the possibilities of developing commercial air routes" (as he himself put it). No man in England is more fitted for the job than Cobham, about to set off on a 16,000-mile trip over patches of

desolate scrub country, bigger than the British Isles, in a plane that has already travelled 50,000 miles.

Behind Cobham and his plane was a wonderful record of service; of trips round Europe that were surpassed only in 1931 by *The Flying Bullet*. This veteran machine had pioneered the route to Rangoon and back. Along in its aerial footsteps went Bert Hinkler, Kingsford-Smith, and "Great" Scott. Cobham's record of flying even then was noteworthy. Briefly, some of his post-war honours, and excursions to make Britain air-minded were :

- 1921. Made an air tour of 5,000 miles round Europe in three weeks, and started Spanish air line to Morocco.
- 1922. Flew 8,000 miles with a passenger to Spain, Northern Africa and Italy. In June of the same year, flew from Belgrade to London in a day.
- 1923. Made a great 12,000-mile flight through Europe, Northern Africa, Egypt and Palestine. Awarded Britannia Trophy. First Britisher to cross Channel in light aeroplane.
- 1924. Flew from London to Africa in a single day, covering 1,250 miles in 12½ hours. During this journey, he accomplished up till then his longest flight—960 miles from London to Madrid. Won King's Cup Race.
- 1924. Flew to Rangoon and back, taking as his passenger the late Air Vice-Marshal Sir Sefton Brancker, Director of Civil Aviation, who was later one of the R 101 victims.
- 1925. Awarded Britannia Trophy. Royal Aircraft Gold Medal.

Here was no callow youth, with but a few hours of flying experience, inspired to make a long and fool-hardy trip. Cobham had planned carefully and with far-seeing eyes. For weeks he had compiled schedules,

investigated the state of distant, almost unheard-of aerodromes, and started unconcernedly on the greatest trip of all.

Cameramen buttonholed him. The owner of the leashed Alsatian was Mrs. Cobham. Photographs were taken. The man with the photographic apparatus, which might have belonged to a cinema studio stowed himself and his gear into the plane. Warmly-dressed woman opened the mysterious parcels and produced an assortment of mascots. Most of them were black cats. They pressed these upon Cobham. But the black cats were not destined to accompany the adventurer to the Cape. Mrs. Cobham strongly suspected that black cats did not bring all the luck legend credited to them!

There was much stowing away of luggage. There were interminable customs formalities. Through it all, Cobham seemed as unruffled as though he were going to photograph a factory from the air, or just speed over to Paris.

In between hurried leave-takings of his mother and other relatives, Cobham explained what he was going to do on this long flight.

"Once I leave Europe," he said, "I anticipate most of my flying difficulties will have been overcome, but I will have new difficulties to face. My job is to make a report on the entire route both from a flying point of view and with regard to the possibilities of developing commercial air routes.

"There are many parts of Africa where at present great commercial centres are only a few hundred miles apart, yet it takes weeks to communicate one with the other by the existing means, whereas by air it would be only a matter of a few hours' flying. In a good many cases it would be faster than the present means of telegraphing. Our chief object is to impress and bring home to the public, by the successful completion of the flight, the fact that aviation is progressing as a means of world transport."

Cobham snatched a hasty kiss from his wife. The Siddeley Jaguar engine of the azure-blue De Havilland 50, purred like a great cat and roared into greater life. It taxied along the ground, nosed up and circled over the aerodrome. Alan Cobham, air pioneer, H. B. Elliott, engineer, and B. Emmott, cinematographer, were off on their great adventure. This was the schedule Cobham had marked out:

November 16.	Lyons.
November 17.	Pisa.
November 17.	Brindisi.
November 18.	Athens.
November 18.	Sollum.
November 19.	Cairo.
November 20.	Assouan.
November 20.	Wadi Halfa.
November 21.	Khartoum.
November 22.	Malakal.
November 23.	Mongalla.
November 24.	Jinja.
November 25.	Kisumu.
November 26.	Tabora.
November 28.	Abercorn.
November 29.	Broken Hill.
November 30.	Livingstone.
December 1.	Bulawayo.
December 2.	Palapye Road.
December 3.	Pretoria.
December 4.	Johannesburg.
December 5.	Bloemfontein.
December 6.	Beaufort West.
December 6.	Cape Town.

Here were some names that sent junior school-teachers scurrying to their atlases in case some over-inquisitive boy should find them napping. To most people they were as distant and unfamiliar as Chimborazo and Cotopaxi, in Ecuador and Colorado. There was opportunity for all three. For Elliott,

the engineer, were the variations of the engine to be considered. Torrential rain, sun-scorched middays, tropical mists, blood-thinning altitudes,—all would re-act on the engine and test his skill.

The photographer, Emmott, would see the whole of the Continent sprawling beneath him. The long sinuous Nile, with dhows on its broad waters, the twenty century-old ruins of Luxor and the Valley of the Kings, the great lakes, the ranging herds of elephant and giraffe, crazy native villages, the Victoria Falls and its spouting cataracts . . . all would fleet past as he lay on the floor of the De Havilland and kodaked them with his long-range aluminium camera.

Months later, even adoring couples in suburban picture theatres were forced to take their eyes off each other for a few half-regretful minutes and concentrate on the screen. Before them flickered impressions of Africa captured by Emmott's mechanical eye.

But for Cobham the opportunity was even greater. There was the question of air mails. It might be possible to arrange a service between England, Khartoum and Kisumu. As early as 1924, Captain T. A. Gladstone, who was to give his life in the cause of civil aviation with Lieutenant-Commander Glen Kidston in 1931, was considering the possibilities of such a scheme. On his own initiative he consulted with the Governments of the Sudan, Kenya, Uganda and Tanganyika. Assured of their interest in the project, he returned to Europe to go into the whole matter carefully. He joined up with the North Sea Aerial and General Transportation Company, and persuaded the Central African Governments to grant him a small subsidy. So when Cobham's plane climbed up from Croydon, one solitary machine was already on order to start the mail service on Africa's first air route.

Cobham looked beyond Kisumu. He looked down to the goldfields of Johannesburg, the diamond mines

of Kimberley, and the stately Cape of Good Hope. Some day, there would be an air service to the end of Africa. But first the route had to be surveyed. Aerodromes that turned into swamps in a night, had to be made serviceable. Governments required persuasion. The cost had to be worked out.

This was the task that awaited Cobham as the De Havilland flew southwards on that foggy morning—November 16, 1925. To conquer the "Dark Continent," the three air-explorers relied on their aeroplane, one suitcase each, containing a change of clothing, and dress-suits, sun-helmets, a three days' emergency ration of food and water in case of a forced landing, a rifle, a shotgun, a cinema camera, 10,000 feet of film stock, a light camping outfit and a small medicine chest.

II

The first day they started late because of the fog. That night the De Havilland put up at Paris. In Johannesburg, the City Council was already planning a civic reception to Cobham when he arrived. He would need that dress-suit and need it often. . . .

Le Bourget. Lyons. Then over the cold, snow-covered Alps. Cold winds blew across the path of the plane. It was rocked and bumped and tossed in the wind eddies, like Van Ryneveld's *Silver Queen*. But again Cobham's experience stood him in good stead. He got successfully through to Pisa, with its leaning tower; then over the historic plains of Italy, where once the Roman legions marched and Hannibal carried out his daring raid, to Taranto.

Here indeed was a warm welcome. The commandant pressed on them warming cocktails and egg brandy flips, to withstand the gale and the thin upper air. While cables bore the news of the death of Queen Alexandra and the newspapers used the blackest and most mournful type, Cobham and his two companions slipped across to Athens. The city

of monuments, the towering Acropolis and the teeming Piræus, received Cobham with open arms. . . . Then came silence. In South Africa, the schedule of the flight was consulted anxiously. Cobham should have been well down the Nile and it was strange that he had sent no details of his movements.

Then news came. He was detained at Athens. Engineer Elliott was busy making final adjustments to the engine before the trip over to Africa. The scheme for fuel supplies had to be rearranged. Just these bare two statements reached the world. Later Cobham explained the delay more fully. "We have discovered the impossibility of keeping to our schedule of arrival and departure," he said. "Daily we are receiving cables all along the road demanding that we prolong our suggested stay for one night, either to attend a special aviation meeting, or to make aerial surveys of districts." Cobham must have smiled happily as the cables came flowing in. His flight might be delayed, but it meant that an air-consciousness was being roused in the places through which he had planned to pass.

On December 6, hospitable Athens and her historic associations were left behind. The De Havilland headed down the island-studded Aegean. But winds and fogs had to be reckoned with. From 6,000 feet down to 2,000 feet, spun Cobham's plane. Before it lay a bank of mist. Then over Cythera, the island of Venus, according to the classics, and round the tail of Crete, one of the cradles of civilisation, into brilliant sunshine. The wind, the storm, and the mist were left behind. Two lovely rainbows spanned the sky ahead. Across 480 miles of water they flew for 3 hours and 50 minutes. A blue shape pitched out of the heavens and landed on the sun-baked aerodrome at Sollum at two o'clock in the afternoon.

This was their first taste of the Continent of Africa. Just then came good news from London. Sir Samuel

Hoare, Secretary for Air, announced in the House of Commons that a flight of five R.A.F. machines would follow in Cobham's footsteps down Africa under Wing Commander Pulford, O.B.E., A.F.C. Even Governments were waking up!

Between Sollum and Cairo lay the Pyramids and the Sphinx, wrought by human power thirty centuries ago. On December 7, the De Havilland hovered above them, and Emmott's camera whined incessantly. The Pyramids were taken widely in its scope . . . and then the plane side-slipped sickeningly. The pyramids rushed up to meet the camera (and months afterwards in the suburban theatres, a hundred "best girls" shrieked excitedly and clutched male arms with justifiable excuse). The plane righted itself, resumed an even keel, and continued on to Cairo.

Out came the dress-suits once more. Interviews, interviews, more interviews. The possibility of surveying from the air the tsetse-fly infested areas of Tanganyika was mooted. There was further investigation to be made into air mail subsidies. People were getting interested in the flight. It became fashionable to do as Cobham was doing. Even the Egyptian Minister of Communications was persuaded to leave the earth for the first time in the De Havilland. Back in England, Captain Gladstone, the air missionary, had arranged to lay his plans before a combined meeting of the East and South African sections of the London Chamber of Commerce. The air was in the news.

By this time, Cobham should have been in Cape Town, according to schedule, but the time was not lost. It was well spent, and Cobham knew it as he left Cairo for Assouan and Wadi Halfa. The De Havilland's engines throbbed faultlessly, and the camera whirled like a distant reaping machine, as the shadow of the plane sped over the open mouths of the tombs at Karnak. Landing on the edge of the

desert, they were met by the Sheik of the village nearby, who carefully guarded the machine while Emmott went in quest of more photographs.

Then on to Assouan, with its great dam supplying the wants of seventeen million people. Emmott was in his element as Cobham swooped over the Temples of the Upper Nile. Wadi Halfa was reached on December 20. In England there was talk of a snow-blessed Christmas. For Cobham, Elliott and Emmott the days grew hotter and hotter.

Across the desert, the railway flung its straight spears of metal from Wadi Halfa to Abbama, while the Nile curved round in a great loop. Following the thin steel ribbon, Cobham covered the 150 mile stretch in 2 hours. By steamer it took 24 hours down, and 36 hours upstream. After that, Khartoum the scene of General Gordon's great stand. Two days remained for Christmas. The heat was greater than ever. Insufferable. Cobham ate his 1925 Christmas pudding at Khartoum, and sent another postcard to his wife.

Once more they set out into the heat-laden air, over the rich cotton fields fed from the Sennar Dam, to Malakal. They flopped down between two palm-encircled native villages. For the natives, this huge bird from the sky held no terrors. They even helped the aviators to push the plane inside the village for protection. From far and near natives summoned by the beating of drums, came to see the white men from the heavens. In honour of the occasion, they performed a Shilluk war dance.

January 3, 1926, saw Cobham at Mongalla. Then followed the first real hitch in the carefully thought-out plans. Lighters from Khartoum were due to arrive with cargoes of oil and petrol. One carrying the oil caught fire. Another with petrol was almost blown up. It meant a weary delay. Only on January 11 did Cobham leave Mongalla and reach Jinja on the lakes, three and a half hours later. In

South Africa, the old maps used in the days of Van Ryneveld and Brand were brought out from a dusty obscurity and new butterflies travelled down the path the *Silver Queen* had pioneered. Kisumu. . . .
Tabora. . . .

The paper butterflies jumped from spot to spot in shop windows, when away up in the North, the *Blue Butterfly* dodged in between rainstorms pelting down remorselessly from hitherto cloudless skies.

Elliott and Emmott sprang out at Tabora and settled down to a banquet of strawberries and cream, passion fruit and apples.

On January 20, the shopkeepers at N'Dola shuttered their windows, boarded their motor-cars with their families, and drove off to see Cobham land at midday. He was on the threshold of South Africa proper. His messages to the newspapers kept the people expectant.

He came on. N'Dola. Livingstone, where the white ants ate a piece of petrol box in a night. Over the copper mines to Broken Hill, which at that time was full of Government officials. They had come to witness the trial of the witch-doctor Mwanelesa, the "Son of God," as he called himself, and twenty-six others, charged with the murder of twenty-two natives. The "Son of God" and his followers, it was said, baptised these natives to see if they were witches. They decided they were.

At Broken Hill, Cobham stuck in the mud, on this occasion while out sightseeing by car. The car sank into a quagmire and cut short the tour. But that was nothing, for disaster almost overtook the De Havilland itself.

Year in and year out millions of gallons of water thunder along a gorge in Rhodesia and crash down for close on 400 feet across an area of a mile. These are the world-famed Victoria Falls. From this giant-seething cauldron rise clouds of thin fine spray, like cigarette smoke. Down swooped the plane towards

the clouds of spray. Emmott turned his camera frantically. Still further down came Cobham. Emmott filmed the picture of a lifetime. A splutter, a gurgling choke. The engine had failed. The aviators held their breath in ghastly suspense.

Then another splutter. The engine picked up and roared into a triumphant crescendo. Cobham and his men breathed again. They sailed up into safety. Looking back on his experience Cobham said, "It was a near thing and will serve as a lesson for other pilots."

Bulawayo was made on the first day in February—exactly a month behind schedule. In Johannesburg and Cape Town official dinners and luncheons were prepared in Cobham's honour. Little did the organisers think that the spot which doomed the *Silver Queen II*, would all but put an end to Cobham's trip. On February 2, the De Havilland beat into life again. It was a dull, breathless morning. A storm threatened. Fully loaded, Cobham taxied along the racecourse which served as an aerodrome. He tried to coax the machine up. She rose for about four feet, and then bumped down over the ground making straight for the bush on which *Silver Queen II* had ended her career. Cobham switched off the engine and pulled up just in time. He tried again. It was no use. The De Havilland never looked like rising. There seemed to be no buoyancy in the air. A brief consultation was held and Emmott and his cameras were jettisoned. Relieved of their weight, the plane skimmed along the ground, opened out beautifully and took the air. Emmott proceeded southwards by train, with ten-minute halts at every siding, and an 18 mile-an-hour gait in between. . . .

Palapye-road, with its broad aerodrome made through the far-sightedness of Chief Khama. Pretoria. Sir Pierre Van Ryneveld was there to meet them, as well as the whole of the Air Force and population. "Journey's End" was in sight. People crowded

round, mobbed the three aviators and added their quota of inscriptions to the body of the plane. "You have done your bit to make England mistress of the air as well as the sea," scribbled one. Another wrote, "Kiss Mrs. Cobham for being so kind as to let you come to Africa in so small a machine." Others scrawled the stereotyped "Will ye no come back again," and "*Boñ Voyage.*"

Johannesburg on February 5. Cobham arrived like a king after a successful campaign. An aerial "commando" of six Air Force machines escorted him from Zwartkop to the Eldorado of South Africa. Streets were lined from early morning. Ears were pricked up for the first sound of engines. Eyes peered over the horizon. Then they came, the seven aeroplanes, over the mushroom city. At the aerodrome there was pandemonium. Cobham had arrived.

Ten busy days followed of interviews, lunches, dinners, lectures, speeches, and signing autographs. Here was the first casualty. Elliott went down with malaria for a few days. He had been careless with his mosquito net in the tropics.

On February 15, the De Havilland was ready to depart. The crowds pressed round Cobham, when an hotel commissionaire slipped quietly up and handed him the tripod of Emmott's camera. It had been left behind in the hurry. Cobham turned to Emmott:

"Got everything, Emmott?"—"Yes."

"Got the tripod in?"—"Yes."

"Well what's this thing? . . ."

Go to Kimberley one day, and they will show you diamonds sticking to greasy pulsating tables. They will take you along crazy streets lined with corrugated iron to a huge hole—the biggest man-made hole in Africa, from which millions in diamonds have been taken. Your guides will point out to you a little platform far below on a ledge where the pigeons

circle round. The Prince of Wales looked down into the hole from that platform. And then they will go on to tell you how Cobham, flying over the hole on February 15, 1926, was almost sucked into it. That is the legend in Kimberley!

Next day, Bloemfontein. • Down to De Aar, the town of trains, and on to the Karoo town of Beaufort West, already acclimatised to flying by the pioneer work of the Solomon brothers. At Cape Town, a battle royal was being waged. Had shingled hair come to stay? "Yes, it has," cried the bright young things. "A woman's glory is her hair," and "All, all is vanity," croaked their elders.

Into this squabble rushed Cobham and elbowed all its pettiness aside. He landed at the Wynberg aerodrome, Cape Town, as dusk fell on February 17, three months and a day after leaving Croydon. Mounted police were required to keep the crowd at bay. Full-rate cables flashed back over the wires to England. Cobham had reached the Cape.

III

Every Friday at 4 p.m., a purplish-grey ship edges away from the quayside at the Cape Town docks. It is coaxed into the middle of the harbour basin by fussing self-important tugs; then shoots out of the harbour entrance for the Atlantic Ocean and England. It is the departure of the weekly mail-boat. All South Africa depends on the arrival of the mail-boat on Monday morning, and her departure on Friday afternoon. Railway schedules are fitted round these cardinal times. On Friday afternoons the sentimental old ladies of Cape Town take a trip down to the Docks in the fourpenny bus, wander aimlessly round the teeming decks of the mail-boat, and then as she goes out, indulge in their weekly, soft-teared weep.

As the tears dropped on the afternoon of February



LIU HIANI K K BINHUY RPLYING TO HIS WLLCOMI AI BARAGWANAH



LILU ULNANI R. R. BINJILY IN IHI SI IR VOJII

26, 1926, the *Windsor Castle* gave one final blast on her siren and headed out to sea. On board were two women who had just broken the archaic South African betting laws. They stood to lose twenty shillings and a tie, if Alan Cobham beat the mail-boat. Just then he was up somewhere in the blue between Beaufort West and Kimberley, striving to reach England in less than the seventeen days taken by the mail-boat.

Early that Friday morning, the *De Havilland* was wheeled out of the hangar at Wynberg. Elliott had put the finishing touches to the engine. Just as the sun gleamed over the mountain, she rose into the air. In the cockpit Cobham carried three precious packages. One was a letter from the Governor-General of South Africa to the King; the other, a letter from the Editor of the *Cape Argus* to Lord Burnham, president of the Empire Press Union, and the third, a copy of the *Cape Argus* addressed to the paper's London offices.

Each tiny South African dorp on Cobham's route turned out to see him pass overhead. Then followed a mad race up the continent in the face of odds.

The first night he made Kimberley. Next morning, he pushed on to Palapye-road, refuelled rapidly, and steered for Bulawayo through terrific storms. On March 1, he left Bulawayo in spite of bad weather reports, and dodged in between storms to Broken Hill and N'Dola. The same day, the first Royal Air Force flight left Heliopolis *en route* for the Cape. Meanwhile, the *Windsor Castle* ploughed steadily through the waves night and day.

At N'Dola five inches of rain fell in a solid sheet. Next morning, as the heavily-laden aeroplane ran along the sodden aerodrome, the wheels stuck in the mud, and Cobham just managed to prevent disaster. Natives came to his aid. They stamped and hammered, and stamped again up and down the runway till it became as hard as concrete. He flew through

the rain to Abercorn. N'Dola to Abercorn—Abercorn to Tabora. The rain was doing its best to thwart him. The aerodrome at Tabora was also bogged. He stuck a second time. Africa's hewers of wood and drawers of water came to his help once more. Fifty stalwart natives hoisted the plane bodily out of the mud. Cobham managed to stagger off the runway and on to Kisumu. Mongalla. Malakal. The heat was terrific as he pressed onwards over swamp and lake. The date was March 4. There was still time to beat the *Windsor Castle*. Each day, back in South Africa, butterflies rose a stage or two on the map, while the Royal Air Force flight came south.

Twelve hours of flying each day was a terrible strain on pilot and plane. Both stood up to the test. At times it was too hot to eat. In addition, Cobham had struck the season of the dreaded sandstorms that fling across the desert at seventy miles an hour, cloak the landscape in a red choking curtain, and clog the engines of aeroplanes.

On March 6, a blinding dust-storm caught him north of Khartoum and forced him to land. During another, the plane was lost. Cobham imagined he had been flying low down over the river Nile that twisted and turned below like a shadow. But he suddenly realised that the shadow was not the Nile at all! It was some phantom creation of his imagination. How long he had been blindly following this ghostly river beneath, he did not know. They were lost. Still nearer the land he dropped and through the clouds of sand, there appeared a dry waterway. A swift calculation was made as to which direction the water would have flown in the furrow, and the plane followed down its bed.

The Nile hove in sight again and Cobham hugged it even more closely than before. There must be no more mistakes.

When he did leave the Nile *en route* for Wadi

Halfa, he kept the railway track in sight. Assouan on March 6. Cairo on March 7. South Africa and Europe thrilled to the thought of Cobham's great dash. "The Taximan of the Air" was certainly exceeding the African speed limit. But there was disappointment to come. Eager eyes looked at the Shipping Register for the date of the *Windsor Castle's* arrival. In taprooms small bets were laid on the chances of Cobham's winning the tie and one pound note. But the mail-boat racer himself kicked his heels at Sollum, ready, but unable, to dart to Athens.

Europe was swept by a terrific gale that made flying impossible. Cobham had a long hop across the sea ahead. The wind was against him. His petrol might run short—and it would be good-bye to the tie. It was not until March 11 that he managed to fly to Athens, and then only through a furious gale. Turning the corner of Cape Malea, the plane bumped about more than it had over the Hex River Mountains way back in the Cape Province. The wind howled off the corner of that vicious Greek promontory. Caught in the backwash of the wind, the aeroplane pitched and rolled like a drunken man.

Athens was left on Friday, March 12. Across to Taranto where the egg brandy flips came from. Hurried on to Pisa. Granted that all went well, Cobham would reach Croydon the next day.

On Saturday afternoon, March 13, another aerial "commando" met him above Sevenoaks, and escorted him back to Croydon. England at that moment saluted Cobham as her greatest aviator. He had flown from the Cape to London in 80 hours.

Without waiting to change his travel-stained clothes, Cobham rushed through London's traffic to Buckingham Palace, to deliver personally the Governor-General's letter to the King. That same Saturday afternoon, the *Windsor Castle* chugged up into the Channel. When Cobham reached London, this

telegram awaited him. "Hearty congratulations on your splendid success—from owners and all on board the *Windsor Castle*."

Cobham, "Taximan of the Air," had won his tie and twenty shillings, and beaten the mail-boat for the first time in history.

III

SIR ALAN COBHAM—SECOND FLIGHT

World's Biggest Flying Boat—Ten Tons of Metal—New Route Planned—Broken Wing at Malta—Lady Cobham's Knitting—King Neptune on the *Singapore*—Champagne Instead—At South Africa's Naval Station—Homewards—Over Diamond Fields and Skeletons—Marooned—Anything Might Happen—"Gunman" Cobham—Rescue—Tornado Blows Up—Sir Sefton Brancker Runs—Safe in Plymouth Harbour.

TWO years had almost passed since Alan Cobham made his great dash back to England to beat the mail-boat. He had become Sir Alan Cobham, K.B.E. He had gone round Britain preaching the gospel of flight. The first air mail had hummed down the highway of the Nile to Kisumu.

When we think of the elaborate relays of aeroplanes, reserves of pilots and the drill-sergeant-like ground organisation that are now deemed necessary for the running of an air service, this pioneer African airway seems almost pathetic. It had one plane at its disposal—a DH 50 seaplane with a Bristol Jupiter engine. Its name was the *Pelican*.

Captain Gladstone's work had borne fruit. He had badgered the Central African Governments, gone back to England inspired with his cause, and in November 1926 the first plane started off. The *Pelican* was wrecked on its initial survey trip. Landing on the innocent-looking back of the Nile between Khartoum and Kisumu, it struck some hidden object. The Royal Air Force came to the rescue. Gladstone was lent a seaplane which, though unsuited for the work, carried out the survey flights.

The first air mail began in real earnest down the Nile. No sooner had the service been put properly on its feet than this seaplane too came to grief on Victoria Nyanza. The *Pelican* was hurriedly repaired in Greece. After delays the service started again.

Sir Alan Cobham became interested in the African air mail. Africa had always allured him. He had not forgotten the Nile, nor the great inland lakes which Gladstone's Company used as its highway. Cobham's company and Gladstone's company amalgamated. The Central African Governments decided to increase the subsidies. But the ill-fated *Pelican* again came to grief. It was proved that the flying boat would be better for the work than a seaplane with floats. . . .

On the morning of November 17, 1927, the largest flying boat in the world—a great metal thing, ten tons in weight—roared off the water at Rochester in England, and kept low up the Thames. The river banks were lined with interested shop girls, bowler-hatted business men and street urchins. Many had gone without their lunch to see the air vessel. A wave of cheering preceded her course up the river. Past the Tower of London, the symbol of ages gone by, went this latest twentieth century marvel. Beneath her scuttled the tiny river craft, easily outstripped.

Along the bosom of the Thames she travelled as far as Reading, and then swung round towards the south at the bidding of her pilot, Sir Alan Cobham. For he was the mahout of this huge aircraft that could nestle on the waters of a creek, and afterwards boldly force her bulk into the air. Behind him, inside the metal tube that served as the bedroom, kitchen, workroom, and cinema studio of the *Singapore*, lent by the British Air Ministry, sat a woman, Lady Cobham. With her husband, she had started out on a 20,000-mile trip right round Africa. Before her lay the perils of the African continent, and the

unexplored West African Coast, where no flying boat had ever gone.

No woman before had attempted a task such as hers. She was to be cook, secretary, and house-keeper in this aerial dwelling for her husband, his assistant pilot, Captain H. V. Worrall, Mr. F. Green and Mr. C. E. Conway, Rolls-Royce engineers, and Mr. S. R. Bonnett, cinematographer of the Gaumont Company. This flying metal tube was to be her home for five long months—the duration of the flight planned by her husband.

Cobham was out once more on an Imperial trip to investigate the flying routes in Africa and follow a new route up the West Coast. Using the waterway of the Nile and the chain of Great Lakes, he would turn the *Singapore* down to Beira and along the south-east African coast, to Cape Town. After that came new ground. . . . Luderitz, Walvis Bay, Port Alexander, Lobito Bay, Banana Creek, Libreville, Bonne, Lagos, Takoradi, Freetown, Bathurst, Port Etienne, Las Palmas, Casa Blanco, to Gibraltar, Barcelona, Bordeaux, Plymouth, and back to Rochester.

On the afternoon of the first day, the *Singapore* landed at Calshot. In bad weather England was left behind. At the same time another plane turned her nose southwards from Croydon. Inside her cockpit was an English nobleman, the tenth in his line, who preferred to be known as plain Mr. John Carberry. He was the man who startled an obsequious society by asking, "why should people kowtow to titles?" In his youth, he had despised the sight of armorial bearings and monograms on cutlery and table linen. He decided to end it all when he came of age. In 1927 he was a wealthy planter in Kenya Colony, and attempting a flight from Croydon to the Cape.

The *Singapore* sped on, her two Rolls-Royce engines singing triumphantly over France to Bordeaux, Marseilles and Ajaccio. Finally she landed

beside the long grey shape of the *Queen Elizabeth* at Malta on November 24. All had been well. The engines were faultless. Cobham had already taken a pile of readings from the array of instruments on the dashboard. The crew was welcomed royally everywhere. Then came a bolt from the blue. A petulant Mediterranean storm blew up as the *Singapore* lay at her moorings. Waves bounded in on her, and the progress of Alan Cobham dropped out of the news for weeks. Back at the Short Brothers' works in Rochester, men worked night and day making a new wing for the *Singapore*.

II

For close on two months, Cobham and his misfortunes were forgotten. The world marvelled at the new Ford, while Cobham kicked his heels at Malta. It was not till the end of the third week in January 1928 that the *Singapore* pulsed with life once more, cruised over the Malta waters and headed southwards. The voyage again went smoothly. Over the barren African coast. Benghazi. Aboukir. Alexandria. Luxor.

The Nile flowed beneath, and Cobham passed over the scenes of his two-year-old record dash back to England. They were busy days for Lady Cobham. She rose at five or six o'clock every morning and prepared an early breakfast. Then, while the metal cabin, flanked by the bunks of the crew, reverberated to the roar of the engines, she typed letters. Towards eleven o'clock, she used to slip into the kitchenette, light a stove and prepare tea.

Bonnett, the cinema man, would leave his cameras for a few moments. Green and Conway would desert their engines. Sir Alan would entrust the piloting to Worrall, and they would all sit happily round, drinking tea and chatting to one another by waving hands, fierce gesticulations and obvious lip

movements. Speech was impossible in that cabin. Tea over, Lady Cobham would sit down once more at her desk, attend to more correspondence and periodically glance at the scenery below.

This apparently casual woman once hated the air. The first time she went up the pilot stunted. Her aerial baptism had been too much for her. It needed all the coaxing and cajoling of Sir Alan to make her forget the sickening sidespins and the headlong dives that had once so alarmed her. Down below her now was the African continent. She would take up a pair of knitting needles and a ball of wool and work on a curious scarf. It was green, with white, red and yellow stripes running through it. No school ever had such colours. It was not for her little boy in England, but a history in wool of the flight. Each gay transverse stripe meant some port touched at. Each day, as the *Singapore* hummed along, Lady Cobham took out her needles and knitted.

On the morning of January 29, the *Singapore* reached Luxor. Next day came the first delay after Malta. A red sand storm, such as had caused Cobham to lose his way two years before, forced them down at Berber. The delay was, however, trifling and they carried on in the heat. Khartoum, then Malakal, 105 degrees in the shade. Mongalla on February 3. The great lake, Victoria Nyanza. Entebbe and Kisumu.

All round the world just between Kisumu and Entebbe runs a line, seen only by joking sailors initiating the young and inexperienced into the mysteries of King Neptune. On board the *Singapore*, there was no Father Neptune to climb over the side as she crossed the line. Even though to Cobham and his men shaving was an everyday occurrence, the ship's crossing-the-line shaving ceremony could not be carried out in the narrow cabin. Instead, as the flying boat went across the Equator, a bottle of champagne was opened and the success of the

"Through Africa Air Route" drunk. Lady Cobham was the first woman to cross the line in a flying boat. . . .

It was March, and never in its history had the African continent been so alluring to airmen and motorists. At Le Bourget, a mitred Archbishop blessed the plane of Captain Mauler, who was about to fly down the West Coast of Africa. Mr. Van Lear Black, the American millionaire, announced his intention of flying to Pretoria. Lieutenant Pat Murdoch, of the South African Air Force, talked of flying from Croydon to the Cape in eight days. Lady Heath landed in the *Saxon* at Cape Town, bringing with her an aeroplane. She was to fly back to London.

Gerry Bouwer, a South African racing motorist, was somewhere in Central Africa in his Cape-to-Cairo Chrysler. A similar Chevrolet Expedition foundered in the Bahora Flats and progressed at the rate of two miles a day. Lady Bailey left London on a lone flight to meet her husband at Cape Town. An old woman of seventy-five, from the United States, arrived in Cape Town after an overland trip from Cairo, and said she had sure enjoyed it some! Two Durban youths set off to walk the 6,000 miles to Cairo. Lieutenant Bentley proposed a honeymoon flight from Johannesburg to England.

The African continent teemed with expeditions of all kinds, as Cobham swooped down over the herds of wild beasts and landed in Portuguese waters at Beira. Torrential rain fell on the *Singapore* as she nodded at anchor. But the crew lay snugly within her metal body. They reached Lourenço Marques, the Monte Carlo of Johannesburg. Durban next.

Mechanics examined the engines of the *Singapore*, and Cobham flew by plane up to the Rand and Rhodesia. The world shuddered at the fate of Captain Hincliffe and Miss Mackay, lost somewhere in the Atlantic on a dash across to America, while Cobham

quietly carried on his propaganda work in South Africa.

On March 29, the ship's sirens in Durban Harbour set up a mighty blast. The bows of the *Singapore's* hull clove through the water, lightly skimmed it and headed along the south coast of Natal. It was soon enveloped in dense rain-clouds that poured their contents on the grateful earth. "The few glimpses of the earth we did catch were covered with rushing water," said Cobham of that day's trip. "There were millions of tons of water in the air. The whole sky seemed to be falling fast. Then I ran into fog. For scores of miles the hot earth below us seemed to be getting its first wetting, and in a blinding smother of white vapour, I steered for Knysna."

Knysna, with its bluff headlands, was reached in the afternoon. The inevitable reception followed. Next day, as the *Singapore* hurtled at 100 miles an hour towards Cape Town, Lady Cobham's typewriter smashed out mail letters for England. The crew took turns at shaving. For the first time in South Africa's history, this holy rite was performed above her territory. Ten tons of metal hovered above Cape Town in dissolving mist as Lady Cobham made a quick change from her khaki gabardine flying kit to a light green frock and hat.

The pilot steered for Simon's Town, South Africa's naval station. He skirted the shores of False Bay, once suggested as a possible venue for the Schneider Trophy race, sloped over the grey bristling shapes of the battle-cruisers, and splashed down beside the training ship *General Botha*. Within five minutes the *Singapore* was tied up and swinging at her moorings.

Rushing towards Cape Town in a swift motor-car, Cobham had little time for the beauty of the scenery. His fingers were busy splitting open envelopes and telegrams. He had to tackle a huge mail. The car left behind a trail of envelopes.

His wife also had mail to look through. From one

letter she picked out the photograph of a little boy, Master Jeffery Cobham, the "taximan's" son and heir, in his first trousers.

For a week, the aviators were feted in Cape Town. Visitors flocked to Simon's Town to see the flying boat lapping at anchor, and some bathers even dared to use it as a diving board. The air called once more. Before them lay virgin country. Each landing would be an experiment. Along the West African coast, the rollers thundered in, precariously ridden by the Kru boys in their crazy craft. All very well for them, but what of the weighty *Singapore* if forced to land on these perilous coasts?

All that Cobham and his crew relied on were their well-tryed engines, three days' potted rations and a small collapsible boat. March 3 dawned cold and cheerless. Across False Bay, a south-east wind whined, blowing sand in vicious gusts, and topping the waves with white crests. A tiny dinghy containing a handful of men, battled out from the Simon's Town wharf and made for the flying boat which swung uneasily. Maliciously the wind caught the dinghy broadside on and set it drifting away from the plane towards the beach.

Out shot the dockyard tug, quickly took it in tow and brought it back to the wharf. Hurried consultations followed, and the dinghy with its full load once more made the attempt. The waves splashed over it, drenching the occupants, but the flying boat was reached. Engines chattered merrily. The moorings were cast off, and the *Singapore* began to drift backwards towards the shore. The tug stood by, ready to lend assistance. The chatter of the engines became a defiant bellow, and gradually the flying boat gathered speed to rise right in the teeth of the wind. In a few seconds, it was out of sight beyond the mountains. With a following wind, it sped over Cape Town at an incredible speed. The corner for the journey home had been turned.

III

Over Saldanha Bay where lies one of the wrecked treasure ships of the Dutch East India Company, swept the great spread-eagled shadow of the *Singapore*, on towards the diamond diggings of the Namib Desert. Below were small pits, fenced with barbed wire entanglements, from which hundreds of valuable diamonds worth fabulous sums were scratched in a few weeks. North of this, Tom Tiddler's ground, lay the desert region of arid yellow sand-dunes where, according to report, human skeletons were found with leather bags of sparkling diamonds beside them.

In this waterless inferno, diamond prospecting was prohibited. Yet, as the *Singapore* raced low down over some pits, footprints could be seen radiating from them in several directions. It was later explained by the Deputy Commissioner of Police that such footprints could be preserved for years in that rainless area. In the German South-West campaign in 1915, he said, "spoor" (the Dutch word for "tracks") were found, which were thought to have been made by the enemy. It was learnt, however, that the footprints were made by men who passed over the area in 1896!

The great shadow rushed over the bare face of the land to Luderitzbucht. Lady Cobham's knitting needles were plied vigorously as they sped on up the hundreds of miles of barren south-west coast. The only live thing to be seen was an animal, not unlike an Alsatian in appearance. It managed to exist in the desert by some freak of nature. Walvis Bay. Lobito Bay. Port Alexander, where a Portuguese warship came to meet them. Up to the mouth of the Congo and the picturesquely named Banana Creek. In the face of storms they went on past Banana Creek to Libreville and Bonne via Fernando Po.

Here were the places where once the old freebooters had rustled slaves. Here were the old forts,

overgrown with vegetation, that had withstood many a tough fight. While all Europe followed the track of the *Bremen* in its flight across the Atlantic, the *Singapore* turned round the Bight of Benin and came to Lagos. Then Takoradi, newest and finest port on the West African coast, recently opened.

A week of misfortune followed. Between Takoradi and Grand Bassam, the petrol began to sink alarmingly. The tank was leaking. There was no alternative but to turn back to the lagoon at Abidjean on the French Ivory Coast. There the leak was repaired. Once again the flying boat was hoisted from the water by the pull of the engines and winged towards Freetown, 750 miles away, in the teeth of the trade winds. The engines purred sweetly and the indicators on the dashboard retained an assuring constancy.

Suddenly, the water temperature gauge began to rise. It mounted swiftly, and Cobham realised that the radiator was leaking. Water dripped down on the forests and lagoons. Another forced landing was in prospect. Luckily, the lagoon of Fresco Bay yawned below. The quiet waters were shattered from their repose when the metal monster landed on the surface, just before the water in the radiator was exhausted.

The engines snorted to a standstill and nothing but the beat of paddles was heard. Canoes with curious native crews swarmed round the flying boat. They bobbed round and round her like a policeman in a traffic jam. So excited did the natives become, that they all but clambered on board. Anything might have happened. Cobham mentioned the word "gun" and went below. Memories, perhaps, of the old slave-hunting days flashed through the primitive minds of the invaders. And when "gun man" Cobham appeared again through the hatchway, paddles were frantically plied to bring their owners out of range of the white man's death-dealing magic. A cursory examination showed that the damage was

more than the limited tools on board could tackle. Cobham and his party were stranded in the middle of the French Ivory Coast.

After some judicious coaxing, a raw native was persuaded to take Cobham to the nearest white man. An hour's search revealed him—a solitary French forestry official. His news was disappointing. He was completely out of touch with the world. The outlook was desperate. By this time people were expecting him at Freetown, and he was isolated as a hermit on top of Kilimanjaro.

Nearby the Atlantic pounded on the shore. Above the heaving waves was seen a trail of smoke. Help was at hand. A hastily scribbled note, and a surf-boat shot across the sea to the ship. Cobham turned back satisfied that at Freetown anxiety would be allayed. The note asked the master of the vessel to radio Freetown of the whereabouts of the *Singapore*.

IV

Next day at dawn, a native canoe, most primitive of craft, merely a hollowed-out tree trunk, lay at the side of the flying boat. Luggage was piled into it. Six burly natives sat in front, their paddles poised ready to urge the canoe forward. Sir Alan and Lady Cobham stepped into it. Six paddles struck the water, six voices were raised in unison, and the canoe sped off on a 40-mile journey to Grand Lahou, on the Ivory Coast.

At times their course took them across open lakes on which the tropical sun beat fiercely. The next minute the canoe scraped along narrow water canyons, barely a yard or two wide, above which the trees spread their thickly-leaved branches and shut out the light of day. Through these gloomy caverns progress was slow. In a big broad lagoon, a trim motor launch was waiting. The French authorities at Grand Lahou had heard of the *Singapore's* mishap

and sent the launch to meet Cobham. There was a quick unregretted transfer from the canoe, and the launch sped along in the setting sun over the lagoons to Grand Lahou. There Cobham made arrangements for a speedy repair to the damaged radiator.

After some delay, Freetown heard the *Singapore's* engines. But more trouble was experienced. A small leak developed in the hull. Captain Worrall dived down below and rose with his hands bleeding. The bottom of the hull was covered with barnacles, just like the pirate ships in the days of the Spanish Main. This was the reason for some of their difficult takes-off. What was to be done? Freetown offered no graving dock for repairs, so at high tide the *Singapore* was floated on to an erection of piles in a shipyard. The tide ebbed and left her high and dry on the improvised platform. Fifty natives set to work to scrape the barnacles from the hull perched on the piles. The job was not without incident. A wind came up suddenly and almost toppled the *Singapore* off.

On May 19, the flying boat was given an O.K. certificate and began her last lap of the African trip. Save for a little difficulty in taking off at Las Palmas, the flight proceeded uneventfully until May 31, the last day of all.

"This was the worst day's flight of the whole trip," Cobham said when he landed on English soil. Leaving Bordeaux early in the morning, he first found beautiful weather welcoming him home. Then before him appeared a blanketing, suffocating belt of fog. Up and down roared the *Singapore* like a caged lion, trying in vain to break through this great white barrier. It was decided to land on a small river near Point du Chateau, and the expectant crowds at Plymouth melted away. Not even Cobham seemed likely to break through that fog. In the afternoon, however, conditions improved and a start was made.

Sir Sefton Brancker, who had gone down to Plymouth to welcome Cobham home, was walking quietly on Staddon Heights overlooking the town. He never dreamed that Cobham would arrive that afternoon. Nevertheless, out of the haze came the drone of engines and then the shape of a flying boat. The aviators were home again. Sir Sefton ran two miles back to the air station, just in time to greet Cobham.

Customs formalities completed, the party crossed Plymouth harbour and was welcomed by the Mayor, appropriately enough, at the Mayflower Steps. An air adventurer returned to the spot where three hundred years before other adventurers, the Pilgrim Fathers, had started out.

IV

LIEUTENANT R. R. BENTLEY.

First Solo Flyer to the Cape—Fourteen Day Schedule—Impudence ?
—Lady Bailey Christens "Dorys"—All Fair—A Comic Knock
—No Hurry—Crocodile Jaws—Excitement in Johannesburg—
A Violent Gale—Blown 140 Miles—Aeroplaning Honeymoon—
Unpleasant Turks—King George's Daughter—Crash with
Kidston—Bentleys Disappear—Search for Aladdin's Cave.

COULD I speak to Lieutenant Bentley please ?
Yes, I could, but I would have to wait a
while as he was in the air.

The time was eleven o'clock one bright morning in the South African winter of 1927 ; the place, the green far-flung Zwartkop aerodrome, six miles from Pretoria ; the person inquiring was myself ; and Bentley was a young lieutenant known to his friends and fellow-officers as " Dick," and not known to the world at all !

I didn't know him. I had just heard about him. He was supposed to be planning a " daring " fourteen day solo flight from Stag Lane aerodrome, London, to Cape Town. I was not greatly impressed. As a newspaperman I had heard so many " daring " plans propounded by cranks and blusterers—and known just as many flops and fiascoes.

The aeroplane which held the mysterious and* to the world, as yet, unknown Lieutenant Bentley, circled, ducked and played a merry game of noughts and crosses with itself in the air. Then it snorted to earth. The pilot sprang from the cockpit, stripped off goggles, helmet and wrappings, and strode hurriedly for the hangars.

I intercepted him. He was a lithe young fellow

with bright eyes, wavy hair, and a self-confident, it seemed almost over-confident, manner.

Lieutenant Bentley?—Yes (still moving to the hangar).

My name is Bennett of the *Star*—Yes. . . .

I want to know if it is true that you intend to fly from London to the Cape?—Yes, it's true. The *Star* is providing me with the Moth.

We were in the hangars and the last aviation garment had been set aside. Bentley rubbed his ears. (The *Star* providing the plane? I was ignorant of it.)

Myself: Well, I would like to know your plans.

Bentley: I'm in a terrific hurry, old man. Going in to Pretoria to the bank now by motor-cycle. I've got to draw some money.

Myself (still persistent in face of a whirlwind haste): Will you call into my office after you've visited the bank?—Yes.

He was off. In two minutes his motor-cycle with howling exhaust was flashing along the tree-bordered road from Zwartkop to Pretoria. I followed on my machine at a respectable distance,—for two reasons. I didn't like swallowing another motor-cyclist's dust. More important I did not care for breakneck speeds. Bentley on a motor-cycle was too much like Bentley in an aeroplane. Speed limits, traffic, pedestrians were non-existent.

That was my first meeting with Bentley.

His name was soon to loom large in the newspapers. So readers, meet Dick Bentley. Lieutenant R. R. Bentley, first solo flyer to the Cape,—The Public.

Born in Streatham, London, in 1897, he joined the R.A.F. at the age of nineteen. That was in 1916, when the call for recruits for the flying corps was urgent. From then until the end of the war he was in the thick of the fighting on the Western Front. His exploits in bringing down German planes and

observation balloons earned him the Military Cross, and he was promoted temporary captain of a flight.

After the war he came to South Africa and joined the Union Air Force with the rank of lieutenant. As fellow-officers he found Lieutenants Pat Murdoch and Caspareuthus, who were destined to smash his and each other's records; and a score of men who had fought with distinction in Flanders—Colonel K. R. Van der Spuy, second-in-command to Colonel Sir Pierre Van Ryneveld, Major H. Meintjes, and the brothers, Captains Hector and John Daniel.

It is as plain Lieutenant Bentley of the South African Air Force, at a far from princely salary, that I am first introducing him. Your first glimpses of him have been at Zwartkop and on a motor-cycle tearing along the winding road to the bank. We will follow his fortunes and adventures for the next eighteen months.

An hour or two after we parted company at the aerodrome, we spoke about his project. The *Star* was financing the first solo flight from London to the Cape. He was off to supervise the construction of the *Star* Moth in England. Still a little sceptical, I wished him luck, never dreaming that when next I saw him, he would be one of the most talked-of men in Africa, the subject of flattering editorials, overwhelmed by huge crowds, welcomed in every town by Mayors and town councillors, and asked to comment as an authority on the future of aviation.

II

South Africa went about her daily business as though the potential air-record breaker never existed. Meanwhile Bentley eagerly watched the completion of his Moth. The great day approached and his time schedule was worked out. He would try to reach Cape Town in fourteen days, an almost impudent attempt at that time. The news was well kept. On

Thursday, September 1, 1927, he was ready to start from Stag Lane at eight o'clock in the morning.

Sprucely dressed in a grey lounge suit with a minimum of luggage and a maximum of self-assurance, Lieutenant Bentley arrived at the drome. A bank of low-lying clouds floated overhead.

Only a few friends, a cameraman and a couple of journalists were there to bid him farewell. The silvery Moth with the name *Johannesburg* cutting through a star, was wheeled out. Lady Bailey slung a bottle against the plane and as the champagne frothed to the ground, it was well and truly christened *Dorys* after its pilot's fiancée, Miss Dorys Oldfield. Cameras shot.

Bentley shook hands. Those not in the secret would never have believed that he was off on an 8,000-mile flight, his own pilot, observer, rigger, mechanic, companion and amateur newspaperman.

It was a day when air news was *the news*. Princess Lowenstein-Wertheim, sister of the Earl of Mexborough, was flying from Upavon Aerodrome, near Salisbury, England, to Ottawa, in the Fokker monoplane, *St. Raphael*. The airmen, Brock and Schlee, in the *Pride of Detroit*, who were flying round the world, were held up at Constantinople for the completion of formalities. Little wonder that Lieutenant Bentley's flight attracted slight notice, except in some of the South African newspapers.

The weather was doleful just as it had been seven years before when the Vickers Vimy and the *Silver Queen* set off. Encouraged, however, by a report that better conditions prevailed towards the coast, Bentley soared away at the first improvement in visibility, circled a farewell in the leaden sky, and was soon devoured by the horizon. The first solo flight to the Cape had begun.

The English coast was left behind. A thick grey mist hung low over the Channel and the Moth swooped down until she was skimming a few yards

above the water. Paris was the first halt, although Bentley had originally attempted to make Lyons in one hop. On to beautiful Naples, then to Malta, 4,000 feet above the sea. The engine purred musically.

To the aviator perched up in the sky with the whole world spread in obeisance beneath him, this was the breath of life. The sea yielded up without hesitation, the African coast for which Van Ryneveld had searched many agonising hours. He made for Sollum. Like paper pellets strewn about a playground by a naughty child, Bentley saw beneath him the tents of Bedouin tribes, whose quaint marriage ritual includes the dashing off on horseback of brides and their recapture by the grooms.

After Sollum, Cairo. Eleven days from Croydon, and Bentley listened happily to the engine turning out the revolutions like a bird.

From Cairo he followed the Nile to Wadi Halfa and caught sight, as Cobham and Emmott had, of the beauties of the ancient civilisations. He smiled at the quaint boats used for transport between Assouan and Wadi Halfa.

Thereafter his route lay across Sudanese soil; over sun-baked railway lines stretching to infinity in the desert; into the lake districts of Central Africa with its insidious perils and savage hordes of pillagers to whom little but their stomachs is sacred.

But a moment! We have travelled in imagination ahead of Bentley and his Moth. He had a rather bumpy passage to Khartoum, and at Kosti he wasted two days chasing an elusive knock in the engine. This was the first sign of engine trouble and it became more apparent after Khartoum. In the desert country the engine had seemed to overheat slightly and develop a knock which became marked on the way to Malakal. At Kosti after searching for the knock, Bentley found that it was due to a piston slap resulting from a distortion of a cylinder.

The next stop was Mongalla and this is what Bentley, the amateur newspaperman, telegraphed, before Bentley, the professional mechanic, went back to examine his engine :

"I landed at Mongalla to-day (September 18). The engine is behaving itself despite a comic knock. I had to dodge a few rainstorms. It is pretty sticky-looking in this country and I am not exploring any forests if I can help it."

Again he telegraphed :

"In the thunderstorm area now, but the *Star* Moth sits easy on any surface. I am cutting out the hurry idea as it is no good taking chances with an engine that has worked well so far."

At Kisumu he found himself nearer civilisation. He thought lightly of the forest areas he had passed over, and what his fate might have been, if compelled to land on the tree tops. He had no need either to resort to the old tricks to keep off marauding beasts—a loud-ticking watch, strange though it might seem as a life-preserver, or a newspaper flip-flapping in the wind.

"The forest country," said Bentley recounting his experiences of the flight, "extends with few breaks from Mongalla to Livingstone. I covered the country between those points at an average height of 4,000 feet. The forests are perhaps not as dense as they have been described, and it is possible to see between the trees sometimes. In parts they are very thick and it would be impossible to land without a risk of damaging a machine or endangering the pilot's life."

At one time too, Bentley confessed with a grin, he passed over a crocodile's paradise in the region of Lake Bangweole. But as if hurling a challenge to the hungry jaws, the Moth rode gracefully, unfaltering in the sky. He had only a passing interest in those jaws.

Another overhauling at Kisumu took two days. Tabora on September 21,—three weeks from London

and he was still far ahead of the previous fastest time. A south-east wind rushed up at Abercorn and caused another bumpy passage. The pilot gritted his teeth as the machine plunged like a cockleshell boat in a heavy sea. Broken Hill at last. Bulawayo on September 25. The headlines had been growing bigger and blacker. Posters shouted Bentley at you. Fellow-diners talked Bentley to you. Barbers shaved you with Bentley.

Johannesburg waited impatiently for another pioneer to zoom over her green suburbs and white mine dumps, and inhale the congratulatory atmosphere of her aerodrome, Baragwanath. Bentley was on the last lap. Ten Air Force aeroplanes went up from Zwartkop to escort him. He roared in a little silver bird beneath the big aerial commando in the noisy, oily, exhaust-riven sky. He was over Johannesburg. In the streets and offices below great excitement reigned.

Bus and tram drivers forgot the strict rules about speaking to passengers and keeping their eyes on the road. Clerks, typists and salesmen poured into the streets. Cheapjacks behind the City Hall stopped persuading their hearers of something to be had for nothing, and gazed up at the sky. The idle tramps who spent their time on benches discussing unemployment, lost the thread of their arguments, and forgot who paid for the last round of beers. Nursemaids ceased t' eir kitchen scandals. Binoculars peered from a thousand windows. A thousand voices with careless disregard for the King's English shouted, "That's him."

Bentley landed. There was jostling and cheering, and babbling and hooting, and policemen issued orders they knew quite well nobody would listen to. There were cheers and speeches of welcome, and handshakes, and more speeches and more replies. Bentley was captured by the reporters who wanted to flash his experiences to the newspapers of five continents.



THE CAPE ARGUS

CAPE TOWN

LIEUTENANT P. MURDOCH IN HIS ARGUS AVRO AVIAN



MR. VAN LEAR BLACK'S AIROPIANI—A PULMAN OF THE SMILS—ON ITS AFRICAN IKIP.

But his flight was not altogether over. There remained the lap to Cape Town, and it provided the most nerve-racking experience of all. It was plain sailing to Beaufort West, the small town in the Karoo. Then the Moth was swept into a strong westerly wind.

Bentley climbed to 7,000 feet and tried to battle his path across the Hex River Mountains. He might as well have tried to fly over the moon. The gale increased to a velocity of 70 miles an hour, spurning his puny efforts. He was flung about the sky like a piece of paper. The throttle was whipped right open and the indicator's needle struggled upwards. It was useless. The Moth was swept backwards for minutes on end, even though the propeller whirled like lightning through the winds, and the engine strained to take her forward.

One violent pitch in that seething ocean of air almost dynamited Bentley out of the cockpit. A stout strap held him and saved his life. The unequal contest drove him 140 miles out of his course. He swooped down over some buildings to find out where he was, and read the name "Heidelberg" on the station roof.

Altering his course and flying due west, Bentley passed Caledon, crossed the beautiful Sir Lowry's Pass, and eddied down to the surface of the Indian Ocean at False Bay. He then steered across the bay once more glimpsing the southern suburbs of Cape Town, and landed at Wynberg aerodrome fourteen minutes later. Bentley was at the end of Africa with 2,000 people to meet him. Serried ranks of admirers pressed towards the Moth. Album, autograph and amateur photographer fiends set about their work. One man leaned on a wing with a camera.

"Hey," cried Bentley in annoyance, "I don't care about your photographs but I do care about my plane."

Letters and telegrams showered thick upon him.

Sir Samuel Hoare, then Secretary for Air, cabled his congratulations to the Union Ministry of Defence. A score of leader writers paid him tribute.

The *London Times* said: "A flight over such a long distance is not yet of everyday occurrence, and Lieutenant Bentley is the first airman to have flown so far by himself. While therefore he has every reason to praise the perfection of the Moth that carried him, his countrymen have equally good reason for acclaiming the man. Perhaps the greatest compliment that can be paid Lieutenant Bentley as an airman and to his Moth as a machine, is to say that the flight was almost entirely without incident."

Lady Bailey, who had followed with great interest the baby Moth she christened, described the flight as "simply magnificent," and congratulated the *Star* on its "sporting and enterprising project."

Followed two feverish days in Cape Town. Interminable interviews, entertainments, dinners, speeches. Bentley learnt the unhappy lot of record-breakers, who, like sweepstake winners and film stars, are thrust willy-nilly into fame and banner-headlines. On October 1, 1927, the *Star* Moth again climbed into the skies to fly round South Africa to Pretoria—home!

The three London-Cape flights at that stage were :

	MILES	DAYS
Sir Pierre Van Ryneveld . . .	8,000	44
Sir Alan Cobham	7,900	94
Lieutenant Bentley	8,285	26

Bentley's time schedule was :

Left Stag Lane.	September 1
Arrived Lyons	September 2
Rome	September 5
Malta	September 6
Homs (Tripoli)	September 8
Sollum	September 10

Cairo	September 11
Khartoum	September 14
Kosti	September 15
Mongalla	September 18
Kisumu	September 19
Tabora	September 21
Abercorn	September 22
Broken Hill	September 23
Bulawayo	September 25
Johannesburg	September 26
Cape Town	September 28

The distances between his stopping places were :

	MILES
Stag Lane to Lyons	470
Lyons to Pisa	320
Pisa to Naples	295
Naples to Malta	370
Malta to Homs	380
Homs to Sollum	620
Sollum to Cairo	390
Cairo to Assouan	480
Assouan to Khartoum	670
Khartoum to Malakal	430
Malakal to Mongalla	360
Mongalla to Kisumu	460
Kisumu to Abercorn	680
Abercorn to Broken Hill	445
Broken Hill to Livingstone	290
Livingstone to Bulawayo	340
Bulawayo to Pretoria	430
Pretoria to Johannesburg	35
Johannesburg to Kimberley	280
Kimberley to Cape Town	540
	<hr/>
	Total 8,285
	<hr/>

III

The *Star* presented Bentley with, the Moth in recognition of his feat, and the next few months—were devoted to preparations for his marriage to Miss Oldfield. Then one day while the two were taking the air several thousand feet above the earth, Lieutenant Bentley looked over "the side" and remarked to his fiancée: "How about a run over to England?" She replied, "Ra-ther." And thus was their aerial honeymoon planned.

The Bentleys were not, however, the first aeroplaning honeymoon couple in South Africa. As early as 1920 Captain D. Mail was married in Maritzburg, Natal, and left on honeymoon with his bride by aeroplane, an unheard-of and even fool-hardy, plan in those days. And perhaps the Bentleys' flight was not quite as unusual as that of a Swiss astronomer. After leaving church, the astronomer and his bride boarded a balloon and sailed among the clouds for thirteen hours. At first they looked down on the marvellous snow-clad Alps sprinkled with sunlight. And then at night gazed in wonder at the starry heavens. Instead of the Alps and the stars, the Bentleys would see the wild animal life of Central Africa, sprawling, unmapped regions.

So back to London we follow Mr. and Mrs. Bentley (he had resigned from the Air Force then), and find him acting the part of aerial policeman en route. Lady Bailey was flying to the Cape but when she reached Cairo, the Sudan military authorities refused to allow her to fly unescorted across their territory. Hearing of her plight, Bentley acted as escort from Khartoum to Nimule, on the Sudan border, and her flight south continued.

On Saturday, May 12, 1928, the Moth deposited her crew of husband and wife safely on the aerodrome from which she rose eight months before. Nothing untoward had occurred on the flight. (They little

guessed the experiences in store for them on their return trip !) But with memories of Africa's sun still fresh, they stamped their feet in rueful evidence of a bitterly cold flight from Paris to Croydon. Off they went to Thetford in Norfolk, for a thorough rest before experiencing the amazing hubbub of London and Continental life.

After a couple of months in England, Bentley became flying instructor of the Liverpool and District Aero Club. During the two and a half months he was in charge, the club turned out eleven competent pilots, two of them women. Although it was the youngest Aero Club in the United Kingdom, the Liverpool club forged ahead so rapidly that its total flying time soon ranked second only to the London Light Aeroplane Club which, naturally, was the biggest organisation of its kind in the country.

As a result the club was awarded the annual Government subsidy of £2,000. Bentley spent many happy hours in Liverpool and afterwards cherished on the side of his Moth, a silver plate inscribed : "To R. R. Bentley. Good luck and best wishes from the Liverpool Aero Club, August 1928."

About this time Lady Bailey was on her way back to England and was again refused permission to cross the Sudan alone. The authorities realised the serious consequences which might have ensued if she were forced down in a hostile spot. But the indomitable Lady Bailey at first refused to recognise the justice of the ban ; and her husband, Sir Abe Bailey, got into touch with Bentley to arrange with him to escort his wife across the Sudan once more. As it happened, Lady Bailey took another route, as I will describe elsewhere.

So the Bentleys prepared for their return to South Africa after an absence of almost a year. They travelled light. Mrs. Bentley's luggage, including evening shoes, weighed $11\frac{1}{2}$ pounds. It consisted of an afternoon frock, an evening frock and shoes,

lingerie, a toothbrush, and a blue morocco dressing-case given her by the Liverpool flying club.

This time the *Star Moth* was fitted with a Cirrus Mark III engine which meant the addition of ten horse-power without any extra weight. Bentley had great hopes for his machine in the Light Aeroplane competition which began in Paris on September 11, 1928, but he withdrew at the last moment in view of his imminent flight to Africa.

"I have enjoyed myself very much in England," said Mrs. Bentley climbing into the aeroplane after her 11½ pounds of luggage, "but I shall be glad to get back to South Africa again." Strange how the South African-born pine for the eternal sunshine, the homeliness of their vast land!

IV

Bentley decided to avoid crossing the Mediterranean and planned a route across Europe which embraced many European cities, such as Brussels, Cologne, Vienna, Budapest, Belgrade and Constantinople. It was the first time a civilian machine had tackled this route, and on one occasion Bentley bitterly regretted it. He would have preferred the Mediterranean to—I will tell what happened. It has a comic, as well as a serious side.

In Turkey in those days it was an unpleasant and risky business flying within bullet range. The marksmen in certain areas fired indiscriminately at the aeroplanes of friend and foe, apparently determined not to miss the foe, whoever he might be.

As luck would have it, Bentley found himself compelled to land on a racecourse, he took it to be that, in Turkey, about fifteen kilometres from a village. No enthusiastic crowds here to welcome him. No profuse invitations to lunches and dinners. That the two visitors from the sky were not at all

welcome, was soon evident. The hostile atmosphere became positively electrical when the Bentleys' cine-camera was spotted. Listen to Bentley's description of the next few unpleasant hours in a foreign country where he and his wife were suspected of being spies :

“ The Turks got most annoyed when they saw our camera. They set an armed guard round my plane and we were not allowed to touch it. We had to spend the night in a neighbouring village and wait for permission to proceed.”

And now the funny part of the experience. Some members of the armed guard had the firm belief that Mrs. Bentley was a member of a European royal family ; in fact, the daughter of the King of England. Needless to say, this awe-inspiring belief was not shattered !

The most exciting incident of the return journey befell Mrs. Bentley. It is doubly interesting because she was involved in a crash with Lieutenant-Commander Glen Kidston, who was fated to meet his death in South Africa a few years later. This is the story of the crash as she told it to me on her return to Pretoria :

“ When we got to Khartoum we had to wait for a couple of days until Glen Kidston arrived from England. It was thought better that I should go in his big Fokker plane as it was safer. I flew with Dick from Khartoum to Malakal, a distance of 300 miles, and from Malakal I flew in the Fokker with Mongalla as our destination. This is a distance of 300 miles over hostile country. Two white men were murdered in that district last Christmas.

“ About 60 miles south of Mongalla we saw a herd of elephants, about 200 of them. It was too late to get to Kisumu that night so we decided to go down and take some photographs of the elephants. We flew about 200 feet above them to do this. In the meantime Dick was well to the east of us. You see,

he did not come down to take photographs as I had the cameras.

"We started to climb again but when he had ascended some 500 feet, the engines began to splutter. The plane is a nine-seater, and, I should have told you, contained besides myself and Glen Kidston, Mr. Donald Drew, the pilot, Mr. Thistlethwayt, a racing motorist, and Mr. Watley, the mechanic. Well, when the engines began spluttering, we passengers stood at the back of the machine. Donald opened the door and cried, 'Hold on, she's going over.'

"They held on to me, because I was so light and they thought I might topple out. Then there was a terrific crash. We were all flung to the front of the machine, the equipment and luggage falling on top of us. Nobody was badly hurt except myself.

"I got a cracked rib. We had fallen into sudd, which is long grass growing in water, and a wing of the Fokker had come off. That prevented us from going over, and we sank down on to the port wing.

"We began sorting ourselves out and then some natives appeared. They terrified us because we were convinced that they would prove hostile to us. So we all stood with revolvers ready in our hands. Fortunately our fears were groundless. They were quite friendly.

"Meanwhile Dick had lost us behind a cloud of smoke, the result of a forest fire to the east. He thought we had gone to Mongalla. On his arrival there, he heard no news of us, so he filled up with petrol and flew back to look for us. He arrived at about five o'clock—we had crashed five hours earlier—and when he spotted us, he dropped a message to say that help was coming.

"At about six o'clock we heard a motor-boat coming up the river, and Archdeacon Shaw appeared. He had come seven miles upstream from Malek and we spent the night at the mission station there. Next

day at about two o'clock Dick arrived on board the Governor's steamer, and we left again at three o'clock for Mongalla. We arrived there the following night at seven o'clock, having taken a day and half to do 60 miles, a distance we could have done in an hour by aeroplane. We spent Sunday at Mongalla, and left the next day for Jinja on Lake Victoria, where we spent two weeks. . . ."

This was Mrs. Bentley's first visit overseas. What did she think of Europe ?

"I loved every minute of it," she exclaimed. "Everybody was so kind to us, particularly the people of Africa."

Which cities did she like best ?

"London, Paris and Cairo are my favourite cities. I wasn't impressed with Constantinople. I thought it a funny little place. It looks as though a puff of wind would blow it away."

Had that crash in the Fokker made her averse to flying ?

"Not a bit of it. We want to go from Canada to South America next."

Had she learnt to fly the Moth herself ?

She had. Her first essay at flying was from Cairo to Luxor and she subsequently used to relieve her husband from piloting on frequent occasions.

The flight took two months and a day altogether. I was at Zwartkop when the *Star Moth* taxied over the drome, a veteran of 35,000 miles and a hundred flights over strange lands. Brown as a berry and wearing shorts and a khaki shirt, Bentley jumped lightly on to South African soil, tore out his baggage, and tossed over a broken bit of wood. It was a piece of the propeller of the Fokker. Mrs. Bentley, who wore a blue leather flying helmet with telephone attachment, rushed to hug her father and mother.

A mechanic grinned roguishly. "Better start the missus housekeeping again, Mr. Bentley," he said with the wink of the knowing married man. "Buy

a frying pan and see if she can fry eggs." This advice given, he drew an oily hand across an equally oily face and cast a critical eye on the aerial continent-eater.

Next to the plate given by the Liverpool Club was another, reading: "From the Aero Club of Kenya with best wishes for successful flights and good landings." A little treasure also proudly exhibited by the Bentleys was a brass plate presented them by the people of isolated Fort Jameson: "Congratulations to Mr. and Mrs. Bentley for being the first to visit Fort Jameson by air. 17-12-1928."

v

Christmas and the New Year were spent in happy reunion with folks in Pretoria. Then the Moth took to the heavens once more to pay another long-promised visit to Cape Town, via Durban. The Bentleys left early one morning, and disappeared as though the skies had divided and snapped them up. While the country-side was being combed by telephone and telegraph, and fears for their safety were expressed, the little Moth was fighting a perilous battle with mist and rain over uninhabited country. It was another experience such as Bentley had encountered when nearing Cape Town on his initial record flight.

Twelve hours later a mysterious telephone message was received in Durban from Mrs. Bentley. But her voice was scarcely audible, and suddenly disappeared. For seventeen hours rumours went the round and the wildest theories were put forward. This is what happened.

The Bentleys left Pretoria in good flying weather, and had no difficulty until reaching a point a few miles north of Maritzburg. They then ran into heavy mist in the hills. Flying in such conditions is always risky, owing to the mountainous nature of the

country, and Bentley remembered uneasily the disaster which overtook Oliver Davis the previous year, when his machine crashed into the face of a hill in a fog.

He tried to find his way out of the mist, but took no chances. Frequently he doubled back on his tracks rather than move forward when he could not see ahead. He had no idea where he was. He had no map, and steered by compass only. Through a break in the mist, he saw a river. It was the Umvoti. He followed it to the coast, and then, as his petrol was running low, decided to land.

Bentley looked at the beach and skimmed it with his wheels. It was too soft. He went further inland, and made a good landing near the river-mouth. The ground was soft and the machine travelled about seventy-five yards in sand.

When the Bentleys landed at 3.30 in the afternoon, after being in the air for six hours, their machine was seen by one Mr. Jacks. He offered to put up the two for the night. They were driven into Stanger, and at about nine o'clock Mrs. Bentley telephoned to Durban to give news of her whereabouts. The line was indistinct and her message was imperfectly heard. Beyond the fact that she and her husband had landed somewhere owing to a shortage of petrol, and were leaving on the following day, nothing could be heard.

When Durban attempted to get into touch with Stanger, the telephone line was out of order and the telegraph offices closed. Some hours went by before telephone communication with Stanger was established, and it was not till then that definite news of the Bentleys was received in Durban.

Bentley filled up with petrol and left for Durban about one o'clock the next afternoon. Owing to the softness of the ground he took off alone. It was better to be sure than sorry, he reckoned. He arrived in Durban twenty minutes later, quite unexpectedly,

and dropped out of the sky on to the Stamford Hill aerodrome in pouring rain. Drenched to the skin he drove as quickly as he could into town, ate a hurried lunch, and returned by car to Stanger to fetch Mrs. Bentley. They arrived together in Durban late in the afternoon. . . .

We have followed the fortunes of Bentley up and down the skies for many thousands of miles. We have seen more adventures fall to his lot in a couple of short years than many of us meet in long humdrum lives. We have seen him battling for his life in the perils of the upper air ; and we have seen him in his hour of triumph. Two more stories, and we shall pass on to meet the pioneers who succeeded Bentley to the throne of public admiration.

The *Star* Moth was put to some strange uses before her pilot left South Africa. Bentley was told of an area in South-West Africa where diamonds were to be found in fabulous quantities. If he located this unknown Aladdin's cave, he could have gone on globe-trotting by aeroplane for the rest of his life in luxurious ease.

The story was not as improbable as it might seem. Millions in diamonds had been discovered in sun-racked Namaqualand to the north. This "diamond valley" lay protected from human trespass by high mountains and waterless country. The little Moth, which had conquered the African continent, sought for the reputed Aladdin's cave. But if there is, indeed, undreamed-of treasure in those forsaken regions, it still remained undiscovered.

Then lastly we will take a hurried glimpse at Verneuk Pan where Sir (then Captain) Malcolm Campbell tried to break Sir Henry Segrave's Daytona Beach record.

Zooming over a marvellous arrow-straight racing track in the desert, we again spy the *Star* Moth. She has flown 320 miles in three and a half hours over tortuous dried-up river-beds, sinister mountain

ranges, veld fires and eddying pillars of dust. Coloured labourers, still unused to aircraft, fling themselves on their faces. The Moth sweeps along the billiard table of Verneuk Pan.

Mrs. Bentley arrived earlier and is busy organising the camp in which Captain and Mrs. Campbell and their children will live. Bentley greets his wife and strides along to a camp surrounded by green bushes. There is a large tent, fire, water-bags, a gramophone and canned fruit. A vivid contrast this with the bustle of Cape Town, 320 illimitable miles away. Dinner is over. Bentley contentedly puffs smoke into the vast silence. What is he saying?—"Now you understand why I won't work in an office. . . ."

That was in 1929. Years have rolled past. We take leave of Bentley and his wife in their London flat. Perhaps they yearn still for the sunlit skyways of Africa. Perhaps they will sail down them again.

THE HON. LADY BAILEY

Africa's Greatest Woman Pioneer—and Record Breaker—No Fuss—Why She Was Late—Sudan Flight Obstacles—No Unescorted Women Allowed—Plight of Bushed Airmen—Rats and Frogs à la carte—Wrecked at Tabora—A Close Shave—Violent Wind Eddies—"Dear Old Table Mountain"—A Publicity Guillotine—Secret Departure—She Chats About Aeroplanes—Up the West Coast—No Maps—Friendly Native Chief—Chickens Ride in the Sky—Plea for All-Red Route.

THE voice was rasping. Its owner had tousled hair and Russian boots. Ten minutes before noon on April 26, 1928, the tousled hair was cramped under a flying helmet and the Russian boots planted on the floor of an aerial Baby Austin 5,000 feet above the ground. At noon the Russian boots trod the Zwartkop aerodrome. This was another of the alleged weaker sex who made the world sit up.

Meet Lady Bailey, next of Africa's skyway pioneers, daughter of the late Baron Rossmore and Lady Rossmore, President of the Suffolk Light Aeroplane Club; holder of the world's height record for a light plane; winner in the 1927 Birmingham air pageant handicap from thirteen men competitors; first woman to fly the Irish Sea to Dublin alone; first woman to pilot a plane from London to the Cape and back; to pilot an aeroplane through the Congo; to fly her own machine across the West Coast of Africa and over the Sahara; first woman to—

Such introductions might make even a compiler of *Who's Who* breathless. This was no pert young Amy Johnson, who staggered the world by her lone flight to Australia, and enjoyed more newspaper

type and transcontinental telephone calls than a deposed king or revolutionary South American president ; no daring Miss Spooner who landed up in the water off the Italian coast.

Lady Bailey was a woman of mature years, " old enough to know better," said the cynics ; wife of Sir Abe Bailey, South African mining magnate, race-horse owner and sportsman, and the mother of several children. She felt like taking a summer holiday. And so without more ado, she slipped quietly away on an 8,000-mile flight to Cape Town. There were more escapes from death and injury in that unusual vacation, than most of us would care to have in all our allotted span.

It was at the Zwartkop aerodrome as well that I met Lady Bailey. I was thoroughly annoyed with her, and for good reason, although journalists are paid not to be annoyed with anybody who is news. The previous day I had camped for over six hours at the aerodrome. I had smoked innumerable cigarettes ; read every word in a newspaper ; paced miles up and down ; scanned the northern skies a million times ; sacrificed my lunch (although I was famished) ; and made a nuisance of myself asking the officers for news of Lady Bailey's progress.

She ought to arrive by midday, I was told. It *was* midday. She could not be much later than three o'clock, as it was only about six hours' flight from Bulawayo to Zwartkop. Well, three o'clock was long past. Four o'clock, then. . . . Five o'clock was at hand. And so was a chilly evening. A couple of planes scouted the heavens that were rapidly taking on a dark evening haze. No Lady Bailey that night !

The announcer from a broadcasting studio told us later in the evening that Lady Bailey had landed at Warmbaths. She was proceeding to Zwartkop early next morning. Another vigil, I told myself grimly. More wasted hours.

Dawn of April 26 was breaking when an acroplane seemed intent on carrying away the roof of my boarding house. It might have contained one of those pilots who do not believe that there are sweeter sounds at break of day than the parting noise of a wide-open howling motor. But then again, it might be an escort for Lady Bailey.

A hurried shave (a hairsbreadth escape from suicide), a more hurried bath, and I tore along to the aerodrome, taking corners at 50 miles an hour. Need I say I was on a false scent?

Breakfastless and disconsolate I began to stroll about once more. This time I had no cigarettes to while away the time. How disgusting to see people arriving at civilised hours, and in excellent time. Noon veered round and Lady Bailey's Moth hurried into view at a great height. Lower and lower it circled and then bumped over the ground churning up the dust.

Was it any wonder that I was fed-up with airmen, airwomen and anything pertaining to them and their silly records? In duty bound I elbowed my way, more roughly than usual, through the gaping crowd of heroine-worshippers. I thrust myself in front of Lady Bailey and in a now-woman-you-can't-escape-me-voice, introduced myself.

What sort of trip had she had? How and when, and where and why, and who, and would and could? She withstood the onslaught well. Each reply was given with a smile and between sips of tea and puffs at a cigarette. "Why did you land at Warmbaths, Lady Bailey?" (I nearly added, "and keep me waiting for hours on a wild goose chase?")

"You see I lost my way and . . . (This in a half-apologetic manner as though explaining to an irate schoolmaster) . . . I ran short of petrol at Naboom-spruit."

What happened at Tabora? When did she intend flying back? What did she think of those obstinate

Sudan people? And so on. I released her from the interviewing rack and thumbscrew and pieced together the story that pursued the wisps of smoke from a pair of determined lips. It was impossible to feel angry with her then.

II

Lady Bailey had cherished the idea of flying to the Cape almost from the moment she shattered the bottle of champagne on Bentley's Moth. The only disturbing factor was the fuss her adventure would cause. So to elude the hawk-eyed camera sleuths of the London newspapers, she set off, furtively almost, from Stag Lane on Friday afternoon, March 9, 1928. It was not to be a race against the clock; but a holiday. There was no room on board for the cabin trunks which women usually carry when setting out on 8,000-mile journeys. All Lady Bailey's luggage was neatly packed away in two small suitcases.

If she did not altogether agree with Lady Heath that a woman could fly across Africa in a Parisian frock, she did at least believe in travelling light, in fact with the airman's proverbial toothbrush. It was her practice to buy any clothes she needed en route, and she collected a wardrobe that would have been the envy of a vaudeville artist. The route she mapped out embraced Facy-le-Petit, just north of Paris, Lyons, Nice, Pisa, Naples, Malta, across the Mediterranean to Benghazi, along the north African coast to Cairo and then by way of Khartoum to Bulawayo and Cape Town.

Nothing untoward happened until Lady Bailey arrived in Cairo. There she was informed that she would not be permitted to fly by herself beyond Khartoum. The authorities, (as detailed in Bentley's flight) determined to prohibit women flying unescorted across the Sudan. In vain did Lady Bailey complain to the Residency that her Moth could not

carry an extra passenger, as all available room was taken up with petrol supplies. Moreover, she had set her heart on completing the flight single-handed. Bentley eventually acted as escort and no trouble was experienced.

It is of interest—to digress for a moment—to picture the plight of the bushed airman in Africa, a position in which Lady Bailey fortunately did not find herself. The bushed airman's first concern must be for his crippled plane; to safeguard it against a savage horde of pillagers, not blood-lusting, black warriors, but far more insatiable destroyers in the shape of termites or white ants. Termites (or mchwa, as the African native calls them), forage by night in countless millions, building with incredible rapidity tiny tunnels of sand through which they move to attack and devour anything in the shape of dead wood, fabric or foodstuffs. A plane attacked by termites could readily be reduced to rubbish in a single night. A bushed machine with its toothsome varnish and fabrics is a gourmet's meal for them.

Lions, leopards, rhino and similar big game will give a plane a wide berth, but hyenas will try to make a meal off the tyres, as many a tenderfoot motorist, who has left a car standing by night on the veld, has learned to his cost. To thwart these interlopers the rule is to build a "boma," or thorn-bush hedge around the plane.

In Africa, where rivers and waterholes are not often found, water is discoverable in the most unlikely spots, notably in the water-cache of the baobab tree. Several native tribes use these huge grotesque trees as water cisterns, tapping a runhole and plugging it after drawing off supplies. The baobabs usually contain gallons of fresh water, and since the tree is found in abundance in most of the worst bush-deserts of the Continent, the seasoned trekker, even if completely bushed, can usually make sure of a supply of that vital liquid. The airman loses

squeamishness when bushed and hungry, and finds that some native delicacies are not at all to be despised. Rats make a very good pie, and so do frogs.

All these perils and "native delicacies," appetising though they might be to the starving, Lady Bailey luckily avoided. Once the Sudan, with its native risings, brutal murders, and anxious (too anxious, thought Lady Bailey) authorities, was left behind, she pursued the even tenor of her flight—until Tabora, which had sounded the death knell of the Vickers Vimy. . . .

Then on the morning of April 10, Lady Rossmore received a cable in London from her daughter. "Crashed at Tabora," it read, "but self alright." At the same time Sir Abe Bailey received another cable, "Crashed landing at Tabora. Self unhurt. Machine badly damaged. Love. Mary." It was a day of triumph and misfortune for women aviators. While Lady Bailey ruefully surveyed the wreckage of her aeroplane, and congratulated herself on escaping with her life, Miss Winifred Spooner caused a sensation in England. Flying a Moth at 78 miles an hour, after only five hours of solo flying to her credit, she won the 21-mile handicap race at Hadleigh, near Ipswich, from four men competitors.

Lady Bailey had reached Tabora at the hottest hour of the day when the severe bumping and rarefied air of the Tanganyika highlands made landing difficult. The opinion was that she came in too fast, and not being used to atmospheric conditions at such altitudes, was unable to judge distances in landing. She clambered out of the plane as it lay upside down.

III

Sir Abe Bailey negotiated for the purchase of another aeroplane and Major H. Meintjes, of the South African Air Force, flew it to Tabora. But it

was almost a fortnight before Lady Bailey resumed the southward flight. She became ill at Broken Hill, and only on April 25 did she land at Bulawayo after being tossed about like a scrap of paper in the violent eddying air currents.

On the last lap from Bulawayo to Zwartkop, Lady Bailey passed over Nylstroom and saw a branch line not marked on her maps. Taking it to be a main line she followed it and eventually found herself 200 miles out of her course with petrol and oil greatly depleted. At Naboomspruit she landed, and informed the country-folk who gathered round, that the tanks needed refilling.

"Motor-cars began dashing all over the place," Lady Bailey told me, "gathering a little petrol and oil here, a little there. When, thanks to these good people, it seemed as though I might get to Pretoria the same evening, I again took the air. But the sun was setting, and I doubted whether I would be able to effect a safe landing at Zwartkop before dark. So I decided to come down at Warmbaths. I do not think (with a smiling grimace), that I have ever seen as many ant-heaps as there were at Warmbaths. Still I managed to miss them and land safely. And here I am at Zwartkop."

We might have seen Sir Pierre Van Ryneveld, first man, escort Lady Bailey, first woman to pioneer down Africa, to Zwartkop. But while flying round in wait for her, Sir Pierre saw one of his young officers crash and landed to give assistance. . . .

This was the air adventure I heard from her that day. Her nerves were of iron. The hand which held a cigarette, just as millions of other women held cigarettes, had steered an aeroplane for 8,000 miles; gripped the joy-stick when an aeroplane crashed to earth. With a minimum of fuss (and what fuss there was she could not help), she had proved, as she stood chatting unconcernedly to me, that women pilots with air sense and courage could share in the

conquest of the air on an equality with men. Long after her personal triumph had faded, it would be remembered that Lady Bailey had flown half the length of the world alone, relying upon her own grit and the skill and workmanship of British manufacturers.

The day following her arrival at Pretoria, Lady Bailey flew to Johannesburg and then on to Beaufort West and the Cape Peninsula, where her husband was awaiting her at Muizenberg.

After leaving Beaufort West at eight o'clock in the morning, Lady Bailey saw mist and cloud ahead. She climbed to 8,000 feet, hoping to find the sun above her and a cloud carpet beneath. Unfortunately, she could not keep that height and the wind lashed about the plane, impeding progress. She continually lost height and could not even maintain a level course at 6,000 feet. Over the Hex River Mountains there were eddies and down-draughts. The mist became thicker and thicker. The clouds at times looked like the sea. Lady Bailey spent an uncomfortable time until she saw "dear old Table Mountain" standing up above the clouds. She made for it regardless of everything.

IV

"Hello, Abe, how are you? I am a bit late, but I got muddled up in the mountains." Thus she greeted Sir Abe Bailey. She might have stepped out of a train de luxe after an hour's ride. There was little time then for a husband and wife *tête-à-tête*. Photographers, the crystallisers of the day's events, buzzed round.

Would Lady Bailey mind posing for a photograph? She would not mind, but for the moment she had to make two hands do the work of twenty. She gained a respite. "Just wait till I get my old hat," she called to the battery of cameras, poised workmanlike

in front of half a dozen half-shut eyes. Pulling off the flying helmet that had sampled the upper air of a dozen countries and running to her Moth, she ferreted about in a little niche invisible from the world.

When her hand reappeared, it clasped, almost lovingly, an old battered felt hat. Lady Bailey liked that hat more than some of her fashionable headgear. Had a woman ever been known to travel, in the twentieth century, so long a distance with so short a range of clothes? We might add one more record to her already formidable list—the only modern woman to travel half the length of the world with an old felt hat and two attaché cases.

Holding a packet of cigarettes and a box of matches she placed herself, a slim figure in woollen jumper and tweed skirt at the mercy of the twentieth-century photographic guillotine—and smiled. Lady Bailey could smile easily. She took things as they came and perhaps, when facing newspapermen, she remembered that Sir Abe was a newspaper proprietor, or at least, “interested” in newspapers.

It was soon over. The photographers chased back to their dark rooms. People pressed forward to inspect the machine. Lady Bailey drove off to Muizenberg. Once more the cables poured into newspaper offices. A woman this time had conquered Africa. Presses thundered out Niagaras of glistening newspapers, recounting the thrills of the flight. Once more the leader writers of England and South Africa united in a harmonious pæan of tribute. The London *Evening News* is a good example of the newspaper comments.

“It is but the bare truth,” it said, “to call Lady Bailey’s flight one of the most remarkable achievements in aeronautics. The route led her over 200 miles of ocean, through the heart of Africa, across the Equator, which has some of the worst flying country in the world. Moreover, Lady Bailey had by no means the experience that a few men who have

made the trip have had. This flight by a woman, trained by a Light Airplane Club, cannot fail to draw attention to facts that both light planes and their engines have definitely arrived as a simple method of travel."

Lady Bailey spent a few days walking and motor-ing, and then soared again into the air where the only robots are mountain peaks, and the jay-walkers, birds scuttling in terror. The Sudanese authorities still refused to allow her to return alone over their dangerous territory; but nevertheless she made up her mind to fly back to England. In vain did well-wishers, including General Smuts, try to dissuade her from tempting an indulgent Providence. The subject of their pleas listened with smiling attention, but unshakeable resolve. She would just slip off and nobody would be any the wiser until she was well on her way.

A fortnight had barely elapsed when Lady Bailey arrived at the aerodrome to start on the first lap of her homeward trip. It was a miserable Saturday morning. The Cape mountains were shrouded in mists, but this did not depress her. She was determined to leave. A suitcase, oilskinned against the weather, was stowed away with tools behind the cockpit. A pile of maps, more precious than food, was handled with the greatest care. A pair of thick iron-studded brogues clambered over the side of the aeroplane.

"Switch on." "Contact." Whirr went the propeller. No result. "Switch on." "Contact." Whirr again. The engine warmed up. Last words of farewell. And while Cape Town was on its way to the humdrum of offices, Lady Bailey sped across the field and away to Port Elizabeth.

Above Sir Lowry's Pass she was faced by mighty pillars of cloud. They stretched seemingly to heaven itself. When she sought a way past, a heavy sea mist came up and intensified the cloud barrier. There

was nothing for it but return to Wynberg. A second take-off was made in improving weather at noon, and a second chorus of farewells rose above the roaring of the engine.

This time Lady Bailey progressed rapidly for close on 400 miles until she made a landing at Humansdorp, 50 miles from Port Elizabeth. There the undercarriage bumped into a sunken road and was damaged. Save for a jolt, the pilot was unaffected. She motored to Port Elizabeth and the Moth was left in the hands of mechanics.

. v

Another aeroplane was procured and the flight to Johannesburg resumed. Not for several months, however, did Lady Bailey leave the Transvaal. During her stay, she went on a shooting trip and spent some while as the guest of Mrs. Evans and Dr. Samuel Evans, one time president of the Johannesburg Chamber of Mines, and an aviation enthusiast. When she at last reconciled herself to the fact that she could not return by way of the Sudan, she planned a route to the Belgian Congo, after which she intended to pick her way along on any information available. . . .

So I camped out at Zwartkop once more, after evading the native sentry at seven o'clock in the morning of September 21, 1928. I had another wait of six hours before me. Profiting by previous experience, I arrived well fortified with cigarettes, a packet of sandwiches and a novel. Sir Pierre Van Ryneveld was making a non-stop dash from the Cape to Pretoria the same morning with General A. J. E. Brink, Secretary for Defence. They were expected after one o'clock. Life for me in those days was one damn flight after another.

At 7.30 Lady Bailey arrived with Dr. and Mrs. Evans from Johannesburg and her machine was wheeled out. We wondered if all her luggage would

get in as we fished parcel after parcel from the motor-car and helped to stow them away. It was in vivid contrast to the two suitcases which accompanied her on the downward flight. Most important among the packages was a spare magneto which she hoped to hand over to Lieutenant Pat Murdoch at Elizabethville. There was scarcely an inch of spare room. The greedy tanks gulped down 43 gallons of petrol weighing 300 pounds. Oil was lopped liberally into the oil tanks. The farewells began. We wished her *bon voyage*, good luck.

The propeller swept round. Lady Bailey was off to England on a route untried by any woman before her. The last I saw of her was a tiny speck fast diminishing into the limitless blue of the African horizon.

That was that. I lit another cigarette, telephoned my office, and settled down on an empty petrol tin with my novel, to wait for Van Ryneveld to bolt down from the skies with still another record. . . .

Most of us would prefer a high-powered car to an aeroplane—that is, if asked to choose between them. Lady Bailey would choose the aeroplane, for then there is no road surface to be considered, and quite 10,000 feet to use as a piece of skyway. But let her tell you herself of her ideas of flying, and after her little chat perhaps you will hesitate before choosing a high-powered car. . . .

“ People who do not fly, think that flying is very difficult, very dangerous and very bad for the nerves. The exact opposite is correct in each particular. Flying is far easier than driving a car. In the first place, there is greater ease of mechanical control with no gear changes to worry about. Then you do not have to consider all the outside factors that make car driving so difficult on the crowded roads of to-day, such as other cars, and the possible behaviour of their more or less skilful

drivers ; the pedestrians with inclinations towards unpremeditated suicide, the young rascal on a bicycle who sees how near to disaster he can get ; and the policeman, who always seems to be with us when we are doing something a little wrong in a car !

“ As to danger, casualties in flying are very rare in relation to the thousands of miles that are flown all over the world, every day. Many of the accidents that do occur are due to the experimental work that is always going on with new types of machines. There is real bravery in trying out something new in the air ; but the well-tested plane, such as the ‘ Moth ’ I use regularly, really is not half so dangerous as driving a high-powered car.

“ And as to nerve strain in flying—well, it does not exist. Flying is so extraordinarily restful. You have no sense of moving as the plane travels through the air. Your highway is the skyway and you have nothing in the way of obstacles to worry about at present, anyway. Later on I expect we shall have to content ourselves with well-defined routes between main centres. But even so, there is a lot of room in the air, isn't there ? There is no road-surface to be considered and you have anything up to 10,000 feet to use as your own particular piece of skyway.

“ As far as the question of clothes for the woman who flies is concerned, all the equipage of the early airman is wasted in a modern light aeroplane. Just as a special motoring garb has disappeared as a separate toilette, so flying has ceased to demand a wardrobe of its own. I wear a leather coat, with a warm woollen scarf, a close-fitting hat and a pair of thick gloves. When I reach my destination, all I have to do is to slip off my coat and wrap, change my gloves and I'm ready for whatever is in prospect by way of luncheon or tea. If I am staying

to dinner for the night, I have a small suitcase with me in the plane and I am often glad that I live in a generation wherein women's clothes can be packed into a small receptacle. The wardrobes of our great-grandmothers would have needed a special luggage-plane to carry them.

"People ask me how long it takes to learn to fly. I can only say that in some fifteen or twenty lessons of half an hour each, anybody should be able to learn to fly a modern light plane, so nearly perfect is its control and reliability. There are many able instructors available, and I am quite prepared to see in the near future manufacturers offering free tuition in flying to every purchaser of a light aeroplane.

"The question of expense is of interest. A good light aeroplane costs about £650 from a British maker and I believe that a German light aeroplane can be bought for £450. The figure of £650 will certainly come down as more and more people fly their own machines. For the mass production of light aeroplanes is as simple as the mass production of cars.

"Already in America there are, I am told, 2,000 light aeroplanes in private ownership and the increase this year will be tremendous. In Germany the value of the light aeroplane is becoming widely appreciated and business concerns are clubbing together—two or three as the case may be—to buy a machine for business purposes.

"Once a light aeroplane has been purchased, it costs something like threepence a mile to run; and when one remembers that one can go direct from point to point, without the need of following a road or railway track with its inevitable deviations, the light plane is the cheapest as well as the quickest form of travel. I do not think perfection has been reached in the light type of aeroplane by any means, either in capacity or speed. I have

every hope of being able to do well over 200 miles an hour in a light aeroplane in the near future.

“ At first sight it is strange to find how timorous local authorities are everywhere about this new method of locomotion. But just this same sort of opposition met the advent of the first railway. The ceremony of cutting the first sod of the Mersey Ship Canal had to be performed at night owing to the powerful opposition. The laying of the first cables was carried out in the face of strongly expressed doubts. The arrival of the early motor-car was much disliked. Why then should we be surprised to find that aviation is meeting in many quarters with just the same incredulity and dislike ?

“ Yet it would have been unwise indeed if none had persisted. We should have been left to-day without trains or canals, cables or motor-cars ! ”

“ Thank you, Lady Bailey. We'll think it over.”

VI

Lady Bailey received a remarkable welcome back at Croydon at the beginning of January 1929. Among those waiting to greet her were Sir Sefton Brancker, Colonel Bertram, Deputy Director of Civil Aviation, Lieutenant-Commander H. Perrin, of the Royal Aero Club, Sir Alan and Lady Cobham, and Captain G. de Havilland, the designer of the machine, and one of the proudest men on the aerodrome that ninth day of January, 1929.

Her chat with a reporter is interesting.

Did you have a good trip?—I enjoyed every minute of it.

No difficulties at all?—(with a grin) My chief difficulty was clothes. My small Cirrus-Moth has not much room for luggage. I could only carry the barest necessities and had to buy clothes as I went along, wherever they were available. Some of the

clothes I got were really remarkable. I am wearing now the quaintest collection of clothes I ever had.

Did you take your time?—Yes. I frequently made detours from the direct route to visit points of interest. My only reason for flying to the Cape was that I wished to join my husband. Flying seemed the best way. After that the rest of the flight was just a pleasure tour and thoroughly enjoyable.

Are you glad to be back?—I had a great but pleasant shock when I saw how my children have grown during my ten months' absence. My eldest daughter, whom I always considered quite small, is now actually taller than I am.

Shortly after her return, Lady Bailey contributed this interesting and comprehensive article on her flights, to the London *Times* :

“ There can be no form of travel like an air tour for providing a comprehensive view of a country or a continent. My recent flying tour through Africa to Cape Town, and now back by the West Coast route, has given me an entirely different conception of the transport needs of this great continent, and the extent to which other nations are endeavouring to swing the whole of the future air traffic along the West Coast of Africa, while Great Britain is still talking about its All-Red Route.

“ Prompt action is essential to establish a main Imperial line of air communication to South Africa. The various British communities are waiting for it ; and in the meantime France and Belgium are steadily laying the foundations for a joint air line direct from Belgium to the north-west border of Rhodesia. I flew along what will be the western route to South Africa, and was surprised to find how advanced were the preparations and how confident of success was everyone.

“ I did not start out last March with any intention of considering the Imperial aspect of African

aviation, and, in fact, any thought of our position was far from my mind. Having learnt to fly, and having acquired a British light aeroplane able with reasonable luck to take its owner anywhere in the Empire, it seemed a natural thing to use it to join my husband in South Africa.

"I felt pretty confident as I was following a well-worn trail along the Egypt, East Africa, Rhodesia route, and having reached Cape Town, a whim, coupled with the disinclination of the Sudan authorities to let me fly alone over their southern area, made me think of the West Coast route via the Belgian Congo, French Equatorial Africa, and the Sahara. No one, so far as I could ascertain, had flown that route from South Africa, and for two months while I was on a shooting trip in the Transvaal, friends on my behalf were endeavouring to get me information about petrol and oil supplies, and maps. I found that maps were unobtainable and that definite information was not to be had.

"It was a question, therefore, of flying with no forward programme at all, just seeing how far one could go. Some officers of the Belgian Air Force, who had motored from Algiers through Reggan to Cape Town, kindly gave me a very good but small scale map of French West Africa. Other maps were obtained of the Sabena air route in the Belgian Congo, and for the rest, a Union-Castle map in booklet form to a scale of about $2\frac{1}{2}$ inches for three hours' flying, had to bridge the gap from Salisbury to the southern terminus of the Belgian air line at Elizabethville.

"I started off one morning in September from the capital of Rhodesia hopeful, but without any clear idea by which route I was going back to England. I found that in reality I had a chain of aerodromes at my service, and a route provided with many more emergency landing grounds than

our own British route, and, as I have said, every expectation and confidence that this was to be one of the great air routes of the world.

“ There is far more preparation going on than the public imagines, and only organisation is needed to make this a simple and easily negotiated channel for the rapid opening up of the whole of the western side of Africa and the Belgian Congo. It may be useful for the guidance of others who would like to break new ground, if I give a list of the aerodromes on the direct route from Rhodesia to Europe. The hours flown on each of these stages will tell other pilots approximately what to prepare for in the way of duration :

	Hrs.	Min.
Broken Hill to Elizabethville	3	10
Elizabethville to Kamina	3	55
Kamina to Musese	5	20
(Gare aerodrome at Luluabourg, some kilometres to the north of the emergency landing ground of Tchumba)		
Musese to Bandundu	3	50
Bandundu to Coquilhatville	3	10
Coquilhatville to Bangi	4	30
Bangi to Fort Archambault	4	50
Fort Archambault to Fort Lamy	4	0
Fort Lamy to Kano	4	20
Kano to Sokoto (via Zaria)	3	30
Sokoto to Niamey	2	15
Niamey to Gao	3	10
Gao to Mopti	5	20
Mopti to Bamako	3	30
Bamako to Kayes	2	40
Kayes to Tambacounda	2	8
Tambacounda to Dakar	3	10

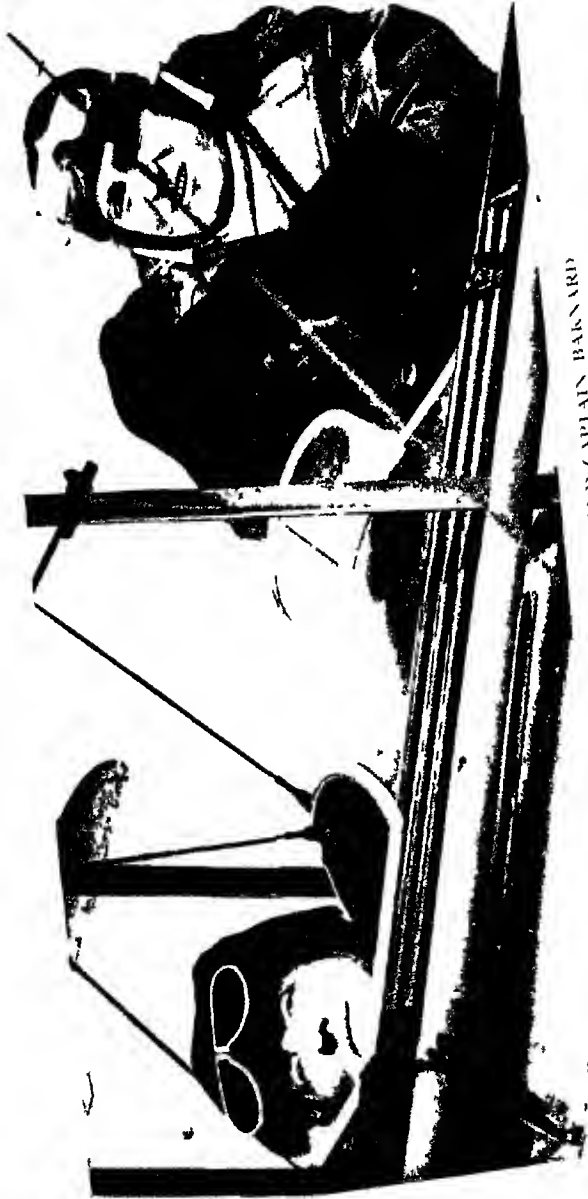
“ I had a strongish following wind from Fort Lamy to Kano, otherwise without this it would have meant about a five hours' trip. After Dakar,

going north, a pilot has the route of the Cie. Generale de l'Aeropostale to Paris.

"Actually I made several detours from this route in order to see the country, and it is not necessary to fly from Kano to Sokoto, via Zaria, though the route is more easily identified going this way. Generally, I carried fuel for nearly 10 hours, but never flew more than between six and seven hours. It is desirable to have tinted goggles and a flying sun helmet, white mosquito boots are essential. I was delayed for a month wrestling with the discomfort of a host of poisoned mosquito bites at Leopoldville.

"Not having been able to procure maps of the whole of the route before I left South Africa, was a real handicap. Their absence gave me some anxious moments. Curiously enough the worst were in Rhodesia and not on the more northerly sections. All I had, for instance, in flying from Salisbury to Broken Hill was a general idea of my destination from local friends. They gave me my direction, with a wave of the hand, in answer to my question, and when, with such maps as I had, I was in the air, some prominent landmark such as a railway line was noted. From this I took a rough bearing, and on this I flew two or three hundred miles.

"This may seem crude, but South Africa is usually blessed with a clear sky, and it is very comforting to see the ground underneath the whole time and a clear horizon miles ahead. But on my trip it was extremely hazy from Bulawayo to Elizabethville, and when I met thick haze on the Broken Hill stretch the deficiencies of my maps made my reserve of petrol very welcome. Mountains were crowding in upon me, and, as I could not climb over them, I was forced to follow the dried-up sandy beds of rivers. These showed up through the cloudy air, and as rivers



THE DUCHESS OF BEDFORD AND CAPTAIN BARNARD



SIR SEFTON BRANCKER CONGRATULATING CAPTAIN BARNARD
(CENTRAL) ON HIS RECORD RETURN FLIGHT TO MALTA
IN TWO DAYS ●

do not climb mountains I knew that while I followed them there was no risk of running into a hidden mountain-side in front of my machine.

“ Twice I followed sandy river-beds at right angles to my proper course, and twice turned back to my original course, and by this means eventually the worst of the haze was passed, and the high ground left behind. More care is required than at home in approaching aerodromes, and it is advisable to have a good look at the surface of all aerodromes before coming in to land. Owing to the heat and high altitudes, in many places one must be prepared to land at higher speeds and, if necessary, with a bit of throttle because of the rarefied air. It is desirable again to be careful of the brand of petrol and oil used, and to make oneself personally responsible for the daily overhaul of machine and engine.

“ One must be prepared in landing at small aerodromes to find a swarm of natives suddenly appear. At Tchumba I waited for two hours by my Moth with hundreds of excited natives looking on, until the local administrator arrived bringing a guard to safeguard the aeroplane for the night. The natives are perfectly friendly but intensely curious. They are quite ready to give assistance. When on the way to Mopti I landed near a village settlement to ask my direction and bent the axle owing to the restricted size of the ground I had chosen.

“ The chief of the village willingly found me a horse to go to the nearest centre. Later, when I returned from Mopti with a mechanic, I brought back some white dress material as a present to the chief of the village. Next day to my surprise he appeared already in his new white dress, which had been made overnight. When I left he presented me with six eggs and two live chickens.

“ Politeness required acceptance, so they were packed into the luggage locker behind the cockpit and flew with me to Mopti. Surely a Moth can carry an odd freight. I quite expected to find the chickens very sorry for themselves when I reached Mopti, 100 miles on, but they were perfectly happy and showed a marked disposition to stay where they were among the maps, luggage, and other odds and ends.

“ The general interest in aviation was one of the most striking features of the flight. Aviation is needed, and I could have sold my de Havilland Moth half a dozen times over. The colonists recognise how the advent of an air route at once brings them into contact with civilization. They feel that medical aid, the absence of which in many places is a constant anxiety to the womenfolk, is at once brought within their grasp. And, above all, they feel that no longer will they be isolated from the rest of the world.

“ There is only one aeroplane, a Moth belonging to Mr. Boyd-Carpenter, in the whole of Nigeria, a country nearly three times the size of the British Isles. Yet over the border in French West and Equatorial Africa there is a chain of aerodromes regularly flown over by escadrilles of French military aviation.

“ Further south in the Belgian Congo, there is a regular air line operating from Boma to Elizabethville which covers in two days a distance requiring weeks by ground transport. There are further extensions to this main trunk route in contemplation, indicating the importance attached to air transport in the colonial development of other nations. England has played a share in this, for the equipment is Handley Page aircraft with British engines; but Great Britain must do more than this to retain her place in the progress of Africa.

“ While I was at Gao, on the southern fringe of the Sahara, they were confidently talking of the through air route from Elizabethville, right on the edge of Rhodesia, to Brussels, being in operation within a few months. The French are preparing to fly inland from Dakar to Gao, and also to open a new and more direct route across the Sahara via Oran on the Moroccan coast, Colomb Bechar, Reggan, and Tessalit to Gao. A fair number of emergency landing grounds exists already between Dakar and Mopti. The French have made themselves responsible for the emergency halts between Gao and Bangi, while the Belgians are coming north from Coquilhatville to meet them. The through route will then be complete, and once it is opened, if there is no British air line, inevitably communications will be through the lands of other nations.

“ Here is a continent of surpassing grandeur to fly over in most parts, especially with proper organisation, waiting for further development. It was saddening, as I flew for hours over an attractive country-side without a habitation, to think of overcrowded Europe, and all because the vital link of speedy communication is missing. The capitalist under existing conditions has not the time to explore personally its possibilities, and, even when he is prepared to finance development, the isolation the settler must face is, in these days, a bar to the speedy opening up of an area.

“ It is at once a proud and disheartening reflection that while the first flight to the Cape was made by Sir Pierre Van Ryneveld in 1920 and other nations are forging ahead fast with their policy of peaceful penetration, the Empire is still without a single air line in Africa.

“ It may be merely the impatience of a woman, but is it not time we ceased to quibble over the exact amount in pounds, shillings, and pence each

unit is to contribute to the cost of an All-Red route, and looked at the broader Imperial aspect? Trade, they used to say, followed the Flag. To-day and in the future it will also follow the aeroplane, for without speedy communications commercial competition is impossible.”

That was in 1929.. Lady Bailey, shrewd business woman as well as daring pilot, told England to wake up. She could not afford to sleep while France and Belgium linked up their African colonies with air lines.

Lady Bailey's call did not fall on deaf ears. Her words, breathing earnestness and a practical first-hand knowledge, helped to set in motion the wheels of enterprise so stiffly clogged with red tape.

As she watched the preparations for an efficient All-Red route and the opening of the Imperial Airways services, in 1932, Lady Bailey no doubt felt that her crashes and forced landings, her risky unmapped West Coast flight, her battles at 10,000 feet with rain, mist, wind and cold, the obstinacy of the Sudan authorities—even the reportorial batteries and camera guillotine, were all very worth while.

LIEUTENANT PATRICK MURDOCH

Some Royal Welcomes to Record Breakers—Lindbergh, Hinkler and Amy Johnson—But Pat Gets Arrested—Military Discipline—Bid for £300 Discount—Over Mediterranean by Night—Flying in Darkness—Where Was He?—Furious Gales—Reprimanded but . . .—Snow-capped Mountains—Forced Down—Cape Town—Hinkler and Murdoch Compared—Londonwards Again—Shattered Hopes—More Starts and Accidents—Delays—That Dud Magneto—Dead Air—Petrol Tank Explodes—Frightful Moments—Escape From Blaze—Farmer Murdoch.

NO president, hero or airman (with, perhaps, the exception of Wiley Post and Harold Gatty who flew round the world within ten days), was ever welcomed like Charles Augustus Lindbergh, when he returned to America after flying the Atlantic from Roosevelt Field, New York, to Paris.

This 3,600 mile, 33½-hour, flight earned him the Orteig prize of 25,000 dollars. President Coolidge welcomed him at Washington. Honours and medals rained upon him. New York's hero-worshippers massed in tens of thousands in streamer-strewn Broadway and (to borrow an Americanism), sunburnt their tonsils for an hour. After that many of the hero-worshippers, or the helpless caught up in their net, were admitted to hospitals with crushed legs and broken ribs. Aviation stocks in Wall Street soared as Lindbergh had soared the Atlantic. A hundred babies born in the United States in 1928 were bequeathed Lindbergh as a middle name. . . .

When Bert Hinkler flew 12,270 miles from Croydon to his home town of Bundaberg, Australia, in 21 days,

he might almost have demanded a portfolio of aviation from the Prime Minister, at Canberra. Australia, from Prime Minister to dock labourer, paid homage to him. Had he lent his name to an advertised brand of tobacco, grown side-whiskers and a goatee, or expressed a dislike for milk in his tea, he would have made a small fortune, for the tobacco manufacturers, and ruined the barbers and dairy farmers. . . .

When Amy Johnson flew to Australia the London *Daily Mail* was even more anxious to proffer her one of its £10,000 aviation prizes, than pay out insurance for a *Daily Mail* victim in a train smash. Although thousands of girls slap the faces of thousands of men, rightly or wrongly, every day of the year, Amy's slap crashed into the headlines of 2,000,000 *Daily Mails* one morning!

When Lieutenant Patrick Murdoch arrived at the Zwartkop aerodrome in his little *Argus* Avro Avian eleven and a half days after leaving Lympne in Kent, and had thus accomplished the fastest down Africa solo flight up to August 10, 1928—he was arrested!

Arrested? Good Heavens! you will ask, and comment, puckering up your foreheads in amazement. Yes, arrested. For him that day at Zwartkop there were none of the gaping, rib-cracked admirers that Lindbergh had; no welcome by Prime Minister or President; no profferers of a cheque that is nowadays only won by the lucky few in sweepstakes.

He had not committed a criminal offence before he left South Africa, nor had Scotland Yard wirelessly demanded for his immediate delivery back in England. Lieutenant Patrick Murdoch had overstayed his leave and was guilty of an offence against military discipline!

Would Lieutenant Murdoch please step along to the office? asked Lieutenant G. MacIntyre, the adjutant. Lieutenant Murdoch did not, could not,

mind. The office was entered. The pioneer prisoner was swallowed up. He was congratulated. Ahem! and told to appear before General Brink at two o'clock in the afternoon to explain why he had overstayed his leave without permission.

Poor Pat! He was quite taken aback. Was this the welcome to give a record breaker? He did not expect, or want, a brass band and mayoral speech but . . .

The throb of the engine was still in his ears. A heaving perilous sea, a ghastly night trip over the Mediterranean, endless, nerve-racking hours of flying, were vivid memories, a few days old. He looked quizzically at his tweed suit and plus fours and gathered up his luggage—a toothbrush and a revolver. Was it to be a court-martial?

II

Pat Murdoch was a good-looking young fellow, barely twenty-five years of age when he halved Bentley's record of 26 days from England to the Cape. He was tall and slender, but muscular, with brown eyes, black hair and a toothbrush moustache. He joined the Air Force as a cadet about a year after it was established, and with six years' service, he spent his long leave in England. While there, he interested a number of well-known men in a project to fly in an Avro Avian aeroplane from London to the Cape and back in 24 days.

Mr. John B. Bodie, one of the founders of the Mexican Eagle Corporation, purchased the machine for £600, and it was understood that in the event of Murdoch returning in or before 24 days, Mr. Bodie would be entitled to a refund of half the price of the machine. The cost of the trip up and down Africa was estimated at £500, and three other enthusiasts, Sir Robert Williams, Captain Fielding-Johnson and Mr. Henry Drummond Wolfe decided to finance

Murdoch's adventurous bid for a new record and a discount of £300 on the Avro Avian.

The words *Cape Argus, Cape Town*," were painted on the Avro Avian (the *Argus* being one of a chain of papers associated with the *Star*, which financed Bentley's flight). On the afternoon of July 29, 1928, it was christened by Miss Beatrice Bodie, *John*, in the presence of Prince Paul and Princess Irene of Greece, Sir Alan and Lady Cobham, Sir Sefton Brancker, Sir John Rhodes, Major Holthouse and Captain Meredith of the South Africa Air Force.

That evening Murdoch spent at Lympne and before four o'clock on the morning of July 30 his Avro Avian sprang off to do battle with rushing headwinds as far as Marseilles. . . .

Only snatches of news of his progress reached the newspapers at first. Nothing was heard of his miraculous escape from disaster when crossing the Mediterranean by night, until he splashed about in a bath at Roberts Heights, nibbled at some food, and donned a uniform in which to appear before General Brink. Without frills or exaggeration, he told his story while he fought with the hands of the clock to reach General Brink in time.

"You know it has all been luck," said Murdoch, fondling a piece of soap and splashing happily. "But I have also had a certain amount of bad luck, for I might have been here a bit sooner. When I got to Marseilles from Lympne at lunch time on July 30, I hoped to start the same afternoon for Catania, in Sicily. Unfortunately it was not to be. In spite of the fact that a cable had been sent from London and Lympne warning the French authorities at Marseilles of my coming, they had been very slack about it.

"I discovered to my annoyance that the petrol supplies I wanted had not been forthcoming, and they kept me hanging about the aerodrome kicking my heels all day. I lost valuable time. I slept

that night in my little machine in the Marseilles aerodrome owing to the distance the aerodrome is from the town.

“ The following morning at 6.30 I left Marseilles for Catania, which lay some 650 miles across the sea. During the whole journey I saw only one ship about 50 miles away, and certainly if anything had happened to my engine I was ‘ for it.’

“ But my engine did not fail me, as I had looked over it very carefully at Marseilles before I left. I passed over the top half of the island of Sardinia, and that was the only land I sighted, till far in the distance the outline of Sicily and the Italian coast could be seen. I was very thankful to land safely at Catania.

“ At Catania, in marked contrast to the attitude of the French authorities at Marseilles, I was treated with the utmost consideration by the Italians. They could not do enough for me. They helped me to look over my engine, and they filled up for me, and generally made a huge fuss for which I was extremely grateful.

“ I had a few hours’ rest in my machine at Catania and at 9.30 that evening I took off on my flight across the Mediterranean to Africa. The night was clear and a bright moon shining. I may say that I was frightened—in a terrible funk the whole time. For the first 50 miles the moon remained bright and I was able to check up the drift of the machine in the wind. I made reckonings and steered for Benghazi on the African coast. Then I flew into a storm.

“ My machine was so heavily laden with petrol that I could not rise higher than 3,000 feet. To have descended nearer to sea level would have been extremely dangerous. And besides, conditions close to the sea would not have been any better than they were at 3,000 feet. I ran into heavy fog and clouds and could see nothing but blackness ahead of me. I

was flying in the dark completely. I could not see the sky, the sea, or the horizon. Nothing but darkness on all sides.

"The only light I had was a small electric globe over my compass and instruments. All of a sudden this tiny light also went out; and I was flying by touch. By the best of luck I had taken the precaution of bringing with me a small electric hand torch. I brought it into operation holding the light over the instruments and keeping an eye on the compass.

"Then I noticed that my altimeter had ceased to function. I didn't know in that inky darkness whether I was 3,000 feet or 20 feet above the sea. To add to my troubles my compass went wrong and I was flying literally and metaphorically in the dark. I went on and on. The weary hours seemed as though they would never end.

"When morning broke—I have never been more thankful for the sight of daylight in my life—I could see from the mist that I was near land. I missed Benghazi in the mist, actually flying over it, a quarter of a mile away from the aerodrome. I flew until my petrol gave out, and then went down through the mists hoping to find a good landing place. My luck was in at last. I sighted an old dried-out pan and made a perfect landing. I was only a few hundred yards away from a fort which proved to be Zuetina.

"The Italian commandant was courtesy itself. He sent a wireless to a neighbouring aerodrome for petrol. A little later an Italian aeroplane, laden with petrol, appeared on the scene and made three attempts to land where I had landed. But the pilot could not do so with his big machine and flew off again.

"Soon afterwards, however, I saw coming across the sand towards me a motor lorry carrying the petrol I needed. Thanking the Italians for their assistance, I made for Benghazi. It took me an hour and a

quarter to reach the aerodrome there, for I had gone 100 miles down the bay.

"The next day, after looking over my machine, I set out for Cairo. I left Benghazi at 4 a.m. and flew into a terrible dust storm, but found Cairo all right. I circled round the city for two and a half hours looking for Heliopolis aerodrome, but could not spot it. At last I landed at Helowan, the second aerodrome of Cairo. The officers welcomed me and showed me by photograph where Heliopolis lay. And would you believe it, it was distant about five minutes' flight by aeroplane. Next day I took off from Cairo for Wadi Halfa.

"Immediately on leaving Cairo, I encountered more fearful dust storms and rain. I could not fly over them because my aeroplane with its heavy load of petrol was unable to rise more than 3,000 feet. I accordingly dashed right through these storms, and was soaked through. I did not try to reach Khartoum in a non-stop flight, because I reckoned that with a very strong headwind against me, I had not enough fuel to last me the distance.

"The day that I reached Khartoum, I went on to Kosti. From there I fled from the rain and dust storms. Conditions were appalling, and I was extremely lucky to get through alive. To have made a forced landing would have been impossible. All the intermediate aerodromes were flooded. Malakal aerodrome was a lake. I had to push on to Mongalla.

"From Mongalla I cabled Kisumu and Tabora asking for petrol supplies to be got ready for me at the aerodromes. But my luck was again dead out. I found on arrival at Kisumu that no petrol was available, and instead of being able to fly on to Tabora the same day, had to waste half the day and the night at Kisumu. There was no direct communication between Mongalla and Kisumu, and I learnt that the messages I sent had to go round by boat. My cable arrived on a public holiday (Monday,

✓

AM M

August 6), and there was nobody to receive or deliver the message. The same thing happened at Tabora, and again I lost valuable time through finding no petrol supplies.

"On Wednesday, August 8, I left Tabora for Broken Hill. I flew straight into the teeth of a furious gale and soon realised that I would never reach Broken Hill with the petrol in my tanks. I therefore changed course and made for N'Dola, which I reached at nightfall. I staggered into the aerodrome with just sufficient light to allow me to make a safe landing.

"This change, of course, necessitated my abandoning the intention of making a night dash to Pretoria. There were other considerations, too. I was dog-tired after my strenuous flight. Besides there was no compass base by which I could check my compass, and it was, I knew, slightly out of true reckoning. Moreover, I had no knowledge of the country and I was too tired to contemplate the task of picking out my way by night. So I decided to fly on to Bulawayo from Broken Hill and to tackle the flight from Bulawayo to Pretoria to-day. This I did. I arrived at Bulawayo at four o'clock yesterday afternoon. . . ."

Pat broke off abruptly. It was time to appear before General Brink. He would tell the last part of his story later—if he were not drastically dealt with.

III

Would inexorable discipline turn a blind eye to the offence of the daring youth of twenty-five, or exact toll? We wondered. What happened in the military holy of holies at 2 p.m., we can only surmise. The terse official announcement stated: "Lieutenant Murdoch has been reprimanded, but informed that he will be allowed to continue his flight if he applies for further leave, and his commanding officer is agreeable to that leave being granted."

To Murdoch that was as agreeable an item of news as any hilarious welcome amid towering skyscrapers and a reception by a Prime Minister (or President). . .

Murdoch breathed more freely when telling of his trip to Pretoria with a knocking engine. He intended leaving Bulawayo before dawn as usual, with a heavily overloaded plane. But so badly did the engine knock when started up, that he decided to take off in broad daylight. A strong south-easterly wind, however, sprang up, and the little band on the aerodrome did their best to dissuade him from proceeding. Like Lady Bailey he smiled at warnings. With a cheery, "I'm going to fly low all the way, so if anything happens, I won't have far to fall," he called forth a response from the engine and sped along. The machine just managed to scale the trees, and set off south-east.

Pat must have expected trouble and a forced landing at any moment of his six hours' flight from Bulawayo to Zwartkop. Yet this is how he dismissed it: "I left Bulawayo at 6.15 this morning. I struck a compass course for Pietersburg. I followed the railway as far as Nylstroom. I struck another compass course direct for Pretoria. And here I am."

These dare-devil airmen make less fuss about their exploits than the stage magicians who produce fictitious rabbits from non-existent top hats. Both would have us believe that it is all perfectly simple. For them maybe, it is.

There was little sleep for me the night of Murdoch's arrival. I had to see him leave for the Cape, and spent the hours from midnight to four o'clock in the morning in front of a fire. A bitterly cold wind tore along the streets of Pretoria, sweeping the rain with it. Murdoch, after a warm welcome in the Roberts Heights mess, had his first decent night's rest since he left Lympne.

At 4.30 on Saturday morning, August 11, I scampered through rain and wind to the motor-car

which was to dash me to the Zwartkop aerodrome. Ugh! those damned record seekers! A more cheerless and forbidding place than Zwartkop at that hour, cannot be imagined. The hangars glistened like huge mausoleums through the rain. The trees crackled and moaned in the blast.

The chauffeur and I entered the deserted aerodrome with chattering teeth. Puddles, disturbed in the darkness, sent a generous layer of mud over our trousers. A knife-edged wind cut across the field at 25 miles an hour from the west. It flung the "sausage," the balloon-like wind indicator, at right angles to the pole from which it hung—an unmistakable sign to the aviator of the battle awaiting him aloft.

At 5.30 Murdoch arrived still wearing his plus fours, as though bent on an early round of golf. Accompanying him was Captain John Daniel. As we chatted, our breath steamed into the frosty air.

Shortly before six o'clock, the pitchy darkness and threatening black clouds were pierced by streaks of the approaching dawn. We helped to push back the sliding doors of a hangar, and wheeled the *Argus* Avro Avian on to the dank, heavy landing ground.

There was no fear of any more knocking in the engine. Expert Air Force mechanics, after a thorough test, found the trouble due to looseness of the bolts holding the propeller to the shaft. Had Murdoch been flying a De Havilland machine, he would have noticed the defect himself at once, as the bolts are exposed. A small cone, however, concealed the bolts on the Avro Avian.

What would have happened if the bolts failed to hold the propeller during the journey from Bulawayo? Murdoch didn't worry. He said he "wouldn't have far to fall!"

We lit flares at various points. In ten minutes the wind had whipped the flares into red flames and Daniel and Murdoch fiddled with the switches and

flung round the propeller. Switch off. Switch on. Contact. So it went on. There was no response from the ice-cold engine. Switch off . . . switch on . . . contact. At last, as though ashamed of its wantonness, the engine sparked into life, and the propeller whirred round. •

Slapping his pockets which contained a few sandwiches, chocolate and, of course, the indispensable toothbrush, Murdoch was ready for his non-stop dash to Cape Town. He had 72 gallons of petrol on board, enough for 13 hours' continuous flying.

It was 6.10 when he raced his engine into a deafening roar and made for the space between the flares. At first the aeroplane wobbled like a great bird that had overeaten itself; but the wheels were soon running on a pathway of air. Back over the hangars it swept into the icy winds, then launched on a south-westerly course to the Cape. I turned homewards for a few hours' sleep in a warm bed. Not to capture any record or discount of £300, would I have braved the wind and sleet in an aeroplane that day.

I expected to see Murdoch within a few days on his return dash up Africa. The fates willed otherwise. When he left us, he had an excellent following wind and averaged 80 miles an hour. All went well until he approached the mountain ranges in the south. The country was in the grip of a late winter. The Hex (Witch) River Mountains were capped with snow. He had to climb to 10,000 feet—it seemed to the top of the world—where a bitter cold numbed his body, a mist impaired visibility, and a wind set his aeroplane a-rocking.

Then Murdoch tried to cross the mountains. He made a first attempt. Contemptuously the wind flung him back. He made a second attempt. No good. He was swept back again. He gritted his teeth. A third time the tiny plane was urged forward with throttle full open. Not in all the 7,000

miles of his flight did Murdoch come nearer to disaster than at that third attempt.

He almost concertinaed the Avro Avian against a mountain, lurking menacingly behind the mist curtain. It would not pay to tempt Providence again. Pat headed away for the coast. He soon discovered that he had strained the engine to dangerous lengths in trying to force his way across the Hex River range. His petrol supply, too, was low.

He glimpsed Cape Agulhas, the most southerly point of Africa lapped by the Indian and Atlantic oceans, and knew that a forced landing was only a matter of time. When nearing Bredasdorp, about 25 miles from Agulhas, his tanks were quite empty.

Gliding down towards a field near the railway station intending to land, Murdoch noticed several mules grazing peacefully. When they saw the screaming thing drop from the sky, the animals stampeded, and Murdoch narrowly escaped crashing into them. He had to swerve suddenly and the tip of a wing grazed some stones. The fabric was ripped away, but he landed safely nevertheless.

In response to Murdoch's request for assistance, mechanics from Cape Town drove to Bredasdorp through the night over 130 miles of indifferent roads. At break of day they were hard at work patching up the damaged wing. Once more Murdoch leapt into the heavens and steered for Cape Town. He arrived at Maitland aerodrome before noon on August 12—thirteen days from England.

Although Hinkler took 21 days to reach Australia—(Captain Kingsford-Smith in July 1929 flew from Derby on the north-west coast of Australia, to the south coast of England in a little over 12 days; and as recently as June 1931 C. W. A. Scott flew from Wyndham, Australia, to Lympne, Kent, in 10 days 23 hours)—Murdoch's flight makes an interesting comparison with his for the first 11 days.

Hinkler, at the time of his flight, held the light



LILUTENANT R I CASPAKU IHUS



CITY OF KARACHI TAKING THE FIRST AIR MAIL FROM THE CAPT TO LONDON ON JANUARY 27, 1932
Lieutenant Casparothus was the pilot

âeroplane world record for the longest non-stop flight from London to Rome on the first day—1,100 miles. On the second day of his flight, however, Murdoch flew 1,300 miles in two leaps—650 miles from Marseilles to Catania, and from Catania to Benghazi, another 650 miles, through the night.

The comparison is as follows :

	HINKLER	MURDOCH
	Miles	Miles
1st day . . .	1,100	550
2nd day . . .	500	1,300
3rd day . . .	400	750
4th day . . .	420	550
5th day . . .	950	635
6th day . . .	690	560
7th day . . .	600	460
8th day . . .	850	375
9th day . . .	600	200
10th day . . .	620	630
11th day . . .	500	430
Totals for 11 days	<u>7,230</u>	<u>6,440</u>
Average each day	<u>657.3</u>	<u>585.4</u>

IV

Would Murdoch be able to complete the return trip within the 24 days planned? was the question on all lips.

Thirteen precious days had already passed. He was left eleven days to brave Africa's dangers once again and combat the execrable sand and rain storms usual in the Sudan during August. It would mean perhaps another gamble with Fortune over a storm-ridden Mediterranean, nightmare of airmen, pleasure-ground of millionaire yachtsmen and jaded financiers.

The fourteenth day, however, was wasted. It may have been an omen of impending disaster higher up in Africa. But Murdoch had no time to think of omens. His Avro Avian had to be skimming the Channel on the 24th day.

He was back at Maitland early on Monday morning, August 13, 1928—only to find that one of his magnetos had blown out. A pretty kettle of fish for the impatient airman eager to be soaring northwards again. It had "gone dud" during the last stage of the flight.

A magneto loaned by Colonel Beatty, of the Cape Town Flying Club, was soon installed. And then the mechanics found that two engine bearers—the short pieces of metal used for bolting the engine to the fuselage—had broken!

Murdoch bowed to the inevitable. While the mechanics again set feverishly about the Avro Avian, he threw himself on the ground and snatched an hour's sleep.

At 1.30 the machine was ready. Murdoch was for careering away without delay. When it was impressed upon him that a late start might get him to Beaufort West at an inconvenient time, he went back home for a refreshing sleep. He awoke early on Tuesday morning, ready for anything—snow-capped mountains, winds, hostile nights, sandstorms, and all the unpleasantness that the Sudan threatened.

At the approach of dawn, Murdoch climbed into his Avro Avian and called "cheerio." The petrol tanks were not lopping to the brims as on the downward flight, for he planned to descend at Beaufort West and refuel. This time he should be able to scale with ease the towers of driven snow in the Hex River district.

At 6.15 the dull roar of an exhaust reverberated through the skies. Nearly five hours later a little speck of silver, which had struggled against northerly gales and passed over snowy mountains, hummed a

warning of its approach to the half-dozen streets, gardens, wickets, and dam, which are the pretty little town of Beaufort West.

At 12.15 the machine, bulging with a gargantuan feast of 70 gallons of petrol, left for Zwartkop. . . . And then came misfortunes as thick upon Murdoch as the snow fell upon the Hex River Mountains behind him. There was more engine trouble. A forced landing. A desperate attempt to carry on. . . . A second return to Cape Town at the end of the month in darkness and soaking rain.

Drenched to the skin, his fond hopes of a 24-day record dashed to the ground, Pat Murdoch drove home to Sea Point. He had had a filthy trip from Victoria West. Once again the Hex River Mountains were enveloped in mists and clouds. Rain pelted down, delaying him for hours. It couldn't be helped, said Murdoch, trying hard to look on the bright side. He would have another shot at breaking his own record in his great little machine. When? . . . Perhaps next week, early in September. . . .

v

On September 11 he set out once more for London, planning a 12-day route of approximately 800-mile stages, as follows :

1st day.	Maitland	to Pretoria
2nd day.	Pretoria	to Broken Hill
3rd day.	Broken Hill	to Tabora
4th day.	Tabora	to Kisumu
5th day.	Kisumu	to Mongalla
6th day.	Mongalla	to Khartoum
7th day.	Khartoum	to Wadi-Halfa
8th day.	Wadi-Halfa	to Cairo
9th day.	Cairo	to Benghazi
10th day.	Benghazi	to Catania (in Sicily)
11th day.	Catania	to Marseilles
12th day.	Marseilles	to London.

The plane was in good condition (said Murdoch), and he had his knowledge of the route to help him. If he failed, it would not be for want of trying. Whether he broke his record or his neck, it was in the cause of flying.

He was in deadly earnest ; but would not admit that the perilous dashes he planned called for any outstanding pluck. Listen to the breezy speech he made when he was presented with a plot of land by the town council of The Strand, a popular resort in the Cape.

" I want to refute the rumour," he said, " that my flight was carried out on pluck. As a matter of fact I was stiff with fright all the way. But then nothing frightens me more than the average train or steamer. Trains always have a chance of running off the rails, and on board, the boatdeck has similar dangers. Flying is different. You set off, and then you just land again at your destination.

" Owing to the youth of flying, people are unfortunately too vividly impressed by the dangers. They lean back in their railway carriages and say ' no flying for me.' They forget that recently there was a railway smash on the Hex River Mountains more serious than any accident in the history of South African flying.

" But the public is beginning to develop air-mindedness. It will realise that flying is a very practical science, that the South African Air Force has a very fine set of fellows, and that any of them could have accomplished my flight. A through route from London to the Cape is practicable at all times of the year, although admittedly a lot of ground work will have to be done."

So Murdoch hummed into the mists at 5.55 a.m. on September 11, signalling a farewell with a flash-lamp. He groped helplessly about in atrocious weather near the Hottentots Holland Mountains, and returned to Maitland an hour later. For two

and a half hours he waited grimly for the mists to clear. Once more the Avro Avian's optimistic nose was set Londonwards. This time it did not return.

"Murdoch arrived here at 1.10 p.m.; taking lunch; had a strong headwind from Hex River," was the brief news we got from Victoria West.

"Murdoch has decided to continue his flight at seven o'clock to-morrow morning, September 12," was the next we heard. He was already a day behind his 12-day schedule!

In Pretoria I foresaw more journeys to Zwartkop. Pat would never admit that luck was dead against him. His Avro Avian was housed in a Zwartkop hangar on the night of September 12. The next morning I again threw myself astride a motor-cycle, and with half-frozen nose protruding from a crash helmet, bumped, spluttered and raced to the aerodrome. Aeroplanes emitting noises like the firing of machine-guns, hovered above me as I drove.

Showing a bold front to a new sentry who understood neither pidgin English nor Dutch, gesticulations or my smattering of a native dialect, I hurried on to the aerodrome at six o'clock. The *Argus* Avro Avian stood ready for a long flight to Broken Hill. Seventy gallons had been poured into the petrol tanks, a sufficient quantity for 13 or 14 hours in the air.

We shook hands with the pilot. Scarcely a breath of wind stirred. He moved off in a whirl of churned-up dust, heading for an incline at the north end of the aerodrome. The wheels had a weight of 500 pounds in petrol pressing down upon them. The engine roared and snorted bravely. Yet the Avro Avian could not rise.

Nearer and nearer it got to a marked slope. Did Murdoch think he could still coax the wheels off the earth? A dull thud; a column of dust shot up; the engine hissed. The plane disappeared in a hollow a few yards away.

Murdoch had bumped over a rough road on the boundary of the aerodrome, narrowly missing a pile of boulders. The tail of the machine had then ploughed through an ant-heap. In a few minutes it was towed out of the rut, undamaged. Obviously a good deal of petrol needed to be drained off before the plane would take the air. During the next hour and a quarter twenty gallons of petrol and a gallon of oil were pumped out, and I tried to sympathise with Murdoch in a sort of moody silence.

“What’s happened now?” It was, I know, a rather exasperating question. “The ground seemed to be coming up to meet me,” he replied somewhat wearily. “I mustn’t take the chance of overloading again. . . .”

We walked about until seven o’clock. Looking impatiently at his watch and the sun fast climbing the heavens, Murdoch said: “Well, there’s no non-stop flight to Broken Hill for me to-day, anyhow. (Again his schedule was wrecked). I’ll have to alter my plans and try to get to Bulawayo by about three or four o’clock this afternoon. To-morrow I’ll do my best to reach Broken Hill and Elizabethville, and then push on to Tabora as quickly as possible. When I reach Mongalla or Kisumu I shall probably fly by night to make up for the delay. The country north of Kisumu is fairly flat and there is not much danger of hitting anything in the dark.” Pat was an incurable optimist.

“Ready, sir?” asked a mechanic at 7.30. He was ready, and sprang eagerly into the cockpit. This time he shot down the incline, rose gracefully, turned, steered northward, and soon merged into the azure leaving a trail of noise behind.

For once the winds followed him and he landed at Bulawayo at one o’clock. The next day he reached Broken Hill and immediately pushed on to Elizabethville. From there he intended flying day and night. He would break the record or his neck,

he had said. Little did he know how near he was to come to the second alternative!

From Elizabethville on September 17, Murdoch sent this telegram: "I landed here last night at 6.15 and intended leaving for Tabora at 5.30 this morning. Natives lifting the tail to move the machine, overbalanced, causing the plane to pitch on its nose. Repairing the damage would cause so much delay that I would be unable to make Tabora before nightfall. I will therefore have to attempt a non-stop flight to Tabora at 5.30 to-morrow. I am staying with Mr. A. A. Thomson, Sir Robert Williams's representative here."

Imagine how Murdoch, chafing under the flicks of the fates, gnawed at his pencil and sighed, when he composed his next telegram on September 18. "Here I am—still detained by a dud magneto. The same trouble as I had in Cape Town. I am endeavouring to fix up some sort of repair by making a new part out of an old magneto and this one. I am extremely chagrined at the realisation of the impossibility of beating my own record now. Notwithstanding this, when the damage is completely repaired, I shall push on to London as fast as possible and attempt to establish a record from here."

There is little more to tell. He set off one morning, and when about 20 miles beyond Kesenga in the Belgian Congo, steered for a mountain pass. An air eddy flung him downwards, and the Avro Avian staggered drunkenly in a pocket of dead air. Below was the bush. Murdoch whipped open the throttle. The plane's nose refused to turn skywards. A wing struck a tree. Down he spun to earth.

The petrol tank exploded. Murdoch jumped frantically for his life from the fierce leaping flames; stumbled away from the wreckage. He was miles from civilisation, from the nearest village even. He struggled on for hours through the jungle and got to a collection of native huts. . . .

Weeks later Pat arrived back in Cape Town. He could still smile, albeit a trifle ruefully when he thought of the shabby tricks the Fates had played him.

As I write, he is farming at Steynsburg, in the Eastern Province. The record-return dash failed and the little Avro Avian joined the *Times*, Vickers Vimy and other aerial relics of shattered hopes in Africa.

But even though Pat Murdoch dropped out of the news, he had won for himself, nevertheless, a worthy place on Africa's air map with Van Ryneveld, Brand, Cobham, Bentley and Lady Bailey.

VII

MR. VAN LEAR, BLACK

A Shy Millionaire—Globe-trotting by Air—Luxurious Pullman of the Skies—What Rumour Said—Mr. Black Talks of Business and Peace—League-of-Nations Flight—Cocktail Mixing Aloft—A Valet's Confessions—16,000-Mile African Trip—A Dutch "Welkom"—And the Reply in 'American—Wonderful Country—"I'm the Worst That Ever Was"—Room for a Small One?—Telegram Hurricane—Dash to Grand National—"Billy Barton," Also-ran—A Tragic End.

"**W**AAL, you see I've worked hard all my life. And now I reckon I'm entitled to a little holiday to see a bit of the world before I die. The quickest way of getting from one country to another is by aeroplane, so I . . ."

He was a gently-spoken, rather shy man, who drawled thus at me—although he was a multi-millionaire. When you looked at the placid good-humoured face, and the lips twisting perpetually into a half-wistful smile, you began to doubt whether the cigar-chewing tailor's dummy who flopped into limousines, and whirlwinded through palatial houses and over-furnished offices in that talkie "Love and Moneybags," was really an American millionaire; whether even Upton Sinclair's bloated and corrupt money-changers had a counterpart in real life.

For it was so difficult to associate this calm reserved man with the frantic hammering and bulling and bearing of Wall Street. You could not imagine him taut at a tape machine; shouting a few magic words into a telephone that would divert a dollar waterfall from a rival's chasm to his own.

Yet Mr. Van Lear Black—for it is of the late

American man of millions that I speak—was really a big financier and business man.

Born in Cumberland, Maryland, in 1875, Mr. Van Lear Black began work at the age of eighteen as a clerk in the Fidelity & Deposit Company of Maryland, Baltimore. He showed great ability and was first appointed director, and later president, of the concern he joined as a clerk.

When still a young man he was actively engaged in big business, and became chairman of the Board of A. S. Abell & Co., publishers of the *Baltimore Sun*; a director of the Struther-Wells Titusville Corporation; the Maryland Dry Dock Co.; the Massachusetts Mutual Life Insurance Co.; the Chatham-Phenix National Bank and Trust Co.; the Chatham-Phenix Allied Corporation, and had, besides, a number of other business interests. He was also chairman, during the war, of the Publicity Committee of the Liberty Loan Drives, and an organiser of the Maryland State Police and the Export and Import Board of Trade.

In 1926 Mr. Van Lear Black decided to spend some of his vast wealth and well-earned leisure globe-trotting like hundreds of other rich Americans. He chose an aeroplane *de luxe* instead of the usual floating palace. He wanted to breakfast, lunch and dine in three different European capitals, and between meals, admire from his luxurious aerial seclusion, an ever-changing panorama.

He had flown almost 200,000 miles, it was said, when he arrived at the Zwartkop aerodrome, the landing place of many pioneers before him, in his £10,000 Pullman of the skies.

You may challenge my description of him as a "pioneer." I will qualify it, and call him a "luxury pioneer." Mr. Van Lear Black, it is true, hardly hazarded his life when he decided to "do" Africa. But his flight had this special significance. It showed that the foundation laid by Van Ryneveld,

Brand, Cobham, Bentley, Lady Bailey and Murdoch, was sound. It proved that the really risky pioneering of Africa was almost over; that luxury travel by air from Europe to the Cape was at hand.

Sitting in his giant Fokker monoplane, the *Maryland-Free State*, Mr. Van Lear Black flew down Africa reading, sleeping and viewing herds of big game, as he might have done from a train. That was in 1929 and it needed a millionaire's deep purse. Now that the Imperial Airways London-Cape service is in full swing, business men from Europe and South Africa will be able to travel on important business errands like Mr. Van Lear Black—Africa's first luxury pioneer.

II

“Waal, you see I've worked hard all my life . . . and the quickest way of getting from one country to the other . . .”

Mr. Van Lear Black sat in immaculate evening dress in the lounge of a Pretoria hotel on the evening of March 2, 1929, and told me, between sips from a specially prepared cocktail, why he flew. I had previously heard him described as a “millionaire recluse,” who meandered along the airlines of Europe and the East day and night because insomnia tortured him on earth. Fantastic rumour said that the throb of an aeroplane's engines soothed him; that the twinkling of the golden lights of cities 5,000 feet beneath him, was his only sleeping draught.

It was quite obvious after listening to that musical friendly drawl of his, that some scare-publicity agent had allowed his imagination to run riot.

“Are you purely out on a sightseeing trip by aeroplane?” I parried.

The musical drawl became earnest. For a moment the half-wistful smile disappeared from a lip fringed with the barest suspicion of a moustache. He spoke deliberately, weighing the import of every word.

"No," he replied, "not altogether that. I want to show that in Africa aviation has wonderful possibilities. (It was the shrewd big business man speaking). I believe that commercial aviation is a real factor, one of the most important factors, in modern life. To give you an example. In flying from Khartoum to Mongalla, we took a little over six hours. When you are told that this distance can only be covered in fourteen days by ordinary transport, you will realise what I mean. The possibilities of the country are enormous, and I cannot understand why England does not turn her eyes more in this direction."

And then Mr. Van Lear Black paused. The business man gave way for a moment to the pacifist. Again the half-wistful smile. He almost rapped out the next few words. "I have flown in about thirty countries all over the world. From my experience I can say that I do not believe there would be all these wars and useless scrapping if aviation played the part it should. Aviation can link up distant countries, lead to a better understanding . . . the words 'annihilation of space' are not really understood yet. I am living an international life. . . ."

The millionaire's secretary hovered noiselessly about us, as dutiful secretaries usually do. Any strategist might have been proud of the manoeuvre which enabled Mr. Van Lear Black to edge away from me to the staircase and his suite. Pondering over his earnest words, I remained talking to the secretary, valet and the fresh-coloured Dutch pilots, and listened enviously to their tales of luxurious aerial travel with Mr. Black to Batavia, Siam, and all the countries of Europe.

When Mr. Van Lear Black planned to spend the remaining years of his life sailing through the skies, seeing something new each day and doing his bit in the cause of world peace—he had been in 1920 a delegate to the Maryland State Convention for the

League of Nations—he determined that his *Maryland Free State* Fokker should be symbolical of the League of Nations; of the ideal of international understanding and co-operation.

It was built in Holland, and on the fuselage was painted the Maryland State flag. The engines were the finest that American brains could devise. The pilots, Geysendorffer and Scholte, and the mechanic, A. van Triet, were Dutchmen. The secretary, Mr. Rene MacColl, a tall handsome young man, was born in England but had lived most of his life in America, and was employed on the millionaire's paper, the *Baltimore Sun*. The valet, Leo Bayline, was an American and hailed from Maryland. Besides having a fund of droll yarns to tell, he enjoyed the reputation of being one of the world's best cocktail mixers.

In the Fokker's cabin, which contained a heating system and a miniature cocktail bar, Bayline gave full rein to his art. The nectar he produced after juggling with toothsome ingredients above Europe's sprawling cities and Africa's jungle, was reputed to cost approximately eighteen shillings a glass. Bayline keeps the secret of those ingredients. . . .

The final international touch was the flying of the machine under a British licence, the licensee, Mr. Van Lear Black, being an American of Dutch descent!

When completed, the *Maryland Free State* had a flying weight of about five and a half tons and afforded accommodation for eight people. The main saloon, usually a mass of beautiful orchids, the millionaire's favourite flower, was equipped, besides the cocktail "bar," with a rich red carpet, sliding windows, luggage racks, ample space for luncheon baskets, and all the other perquisites of aerial luxury.

Beside the windows were easy chairs offering cosy depths for sleepy occupants. Window-paned from the cabin sat the pilots. The roar of the engine was

loud but not deafening, and the passengers, in any case, soon became accustomed to it. The international aeroplane, on its endless cruising through international skies, consumed thirty gallons of petrol and travelled 100 miles each hour.

This is how Bayline, valet, cocktail mixer, and raconteur, described his unusual job flying with Mr. Black: "When we first took off at Croydon, three years ago (in 1926) I wasn't exactly nervous—I was scared. I began to wonder what would happen if the machine suddenly dropped. I soon got used to it. After that it was not unusual for Mr. Black to come into the hotel in the morning and say, 'We'll hop over to Berlin,' or some other place, and all at a moment's notice.

"One morning in Amsterdam Mr. Black said that he was going to Batavia. 'O.K.,' I said, and in five minutes I was ready. Of course I know what Mr. Black wants when he turns round. (I was forcibly reminded of the old tag about valets and their unheroic masters.) In South Africa we travel light on account of the high altitude. Otherwise we carry exactly the same things we would on a voyage or on a journey by rail. We have difficulty sometimes at the smaller aerodromes.

"At Singapore once, I remember, on our Amsterdam-Batavia trip, we had to fill up at the aerodrome and then take off from the racecourse. . . . Generally speaking the machine is steady, but when she strikes a good-sized air-pocket, it sometimes feels as if your skin is leaving your bones. Duty on board to me is all in the day's work. I go about it just as if I were in an hotel."

Before the aerial palace and its crew visited South Africa, the longest flight was to Batavia. On the way, at Bangkok, Mr. Van Lear Black was regally entertained by the Prince of Siam. But as this chapter is concerned only with the *Maryland Free State's* flight down Africa, we will not endeavour to

follow its trips to the thirty countries whose flags were sewn round the walls of the little saloon.

A first attempt to fly to the Cape was made in 1928, but owing to a damaged wing at Khartoum, the flight was abandoned. As Europe was anything but an aviator's paradise early in 1929, being swept by storms and blizzards, the millionaire decided to pay his deferred visit to Africa in February 1929. There were, however, some legal formalities to be gone through first, for the monoplane was American owned, flown by Dutch pilots, and under a British licence. The difficulties were overcome by registering the flight as a limited liability company, under the style of V. L. Black Limited, with offices in Throgmorton Street, London. An inscription to this effect was borne by the plane during the African trip.

Then came the matter of insuring the Fokker and the personnel. The amount for which the flight was insured was stated in London to have been upwards of £200,000. The machine itself accounted for £10,000.

III

Early on the morning of February 11, 1929, Mr. Van Lear Black and his staff drove to Croydon. They were to "do" Africa for a few weeks, and then return for a business appointment and the Grand National. They were going to make it snappy. At 8.40 Geysendorffer and Scholte were in the pilots' cabin and Mr. Black stood, happy as a schoolboy, chatting to his friends. He climbed on board and waved a hand in farewell through a window, as the *Maryland Free State* raced off on another 16,000-mile trip, during which over 5,000 gallons of petrol would be used.

Geysendorffer, the principal pilot, was one of the best airmen in Europe at that time. A few days before the African flight he flew the Fokker from Rotterdam to Croydon in exactly two hours, carrying

four passengers, some heavy luggage, spares and 500 gallons of petrol. It was so stormy that three other Continental aeroplanes *en route* for London at the same time were forced to descend after making the English coast. No machine, save the Fokker monoplane, succeeded in battling through to Croydon.

The weather and visibility being particularly bad on February 11, Mr. Black decided to remain in Paris for a week. He left Le Bourget on February 18 and arrived at Marseilles the same day. Forty-eight hours later Naples was reached, and a non-stop flight of over eight hours from Athens brought the party to Cairo on February 22. When Crete merged into the ocean behind them, they shook off the storms of Europe and sampled Africa's sunny, sometimes broiling, skypaths.

Flying over the Sudd, Geysendorffer found a great heat haze shimmering in front of him, and swooped down to 100 feet or 50 feet from the ground. He passed over elephants, lions and gazelles in large numbers. One herd of waterbuck, 10,000 strong, wheeled round like a regiment of cavalry as the *Maryland's* terrifying roar came upon them. Hippos and crocodiles too there were in plenty, seemingly more than lashed themselves about in the pools of all the world's zoos.

Natives scuttled to hiding places. For hours the passengers watched from the sliding windows the ever-changing fauna and flora. They visited the famous Rain Forest and Victoria Falls, which Mr. Black admitted to me, out-niagaraed Niagara. On to Bulawayo. Remembering it was in the Matoppos that Cecil John Rhodes lay in his grave, Mr. Black sent out a bouquet of flowers in the name of Sir Robert Witt, a personal friend of Rhodes, and veteran of the Matabele wars, who lived in England. The millionaire climbed on board once more to land on South African soil at Zwartkop on Friday afternoon, March 2.

That Friday was a busy day at the aerodrome. In the morning four Royal Air Force planes arrived from Cairo under Squadron Leader C. R. Cox, A.F.C., after a four and a quarter hour trip from Bulawayo. On the way down they had helped to carry mails from N'Dola and Broken Hill to Bulawayo, as postal services were crippled by the Rhodesian railway strike.

Although the R.A.F. and Mr. Van Lear Black left Cairo and Croydon respectively about the same time, the millionaire had taken the lead as far as Bulawayo. I was one of the large number of people who had their first view of the blue and light brown Fokker at Zwartkop. Officers of the Air Force looked doubtfully from its great bulk and tremendous wing span to the hangars which were scarcely built to accommodate anything bigger than the DH 9. The solution was found by wheeling it in sideways . . . and the Fokker spent some nights in a hangar dwarfing the biggest machines that kept it company.

You may remember that I referred earlier to the misconceptions concerning the multi-millionaire. One was that he spoke High Dutch and would only reply in curt monosyllables to the interviewers who flocked about him. As he alighted from the Fokker followed by his secretary (in comfortable hiking attire), and the two pilots, Mr. Black was welcomed by the leading citizens of Pretoria, officials of the Civil Air Board and Air Force officers.

A newspaperman, deciding to take the bull by the horns, cleared his throat, straightened his tie and hair, and accosted Mr. Black in his best High Dutch.

"Welkom Mynheer Black," he began. "Er . . . er . . . hoe laat is u Bulawayo verlaten? Heeft u 'n plezierige reis gehad?" . . . (Welcome, Mr. Black. What time did you leave Bulawayo? Have you had a pleasant journey?) His accent must have thrilled the pilots, Geysendorffer and Scholte—if they heard

it. To hear High Dutch spoken in a country where only English and Afrikaans were used!

Mr. Black, however, seemed embarrassed. He tugged at his tie, uttered a dubious "yeah," and turning apologetically from the questioner, murmured to a bystander: "What did he sa-ay?" . . . So yet another illusion about him was shattered. After that we chatted to him in English, and he replied in American, until he was whisked off to the Pretoria hotel where I met him later in the evening.

The next few hops down to the Cape were soon accomplished. At seven o'clock on the morning of March 5, the Fokker melted away into a black threatening sky carrying 370 gallons of petrol and 51 gallons of oil. This fuel for the 850 air miles from Zwartkop to the Cape, weighed over 3,000 pounds. At 4.5 in the afternoon the machine came to rest at the Wynberg aerodrome. The first part of the African trip was over.

Much as he was impressed by the picturesque Cape Peninsula, its rugged mountain grandeur and lavish hospitality, Mr. Black started to hustle back to his business appointment in London, and the Grand National at Liverpool on March 22. His friend, Mr. Harry Bruce, was entering "Billy Barton" for the race that year, and Mr. Black wanted to see it win. As it happened, he neither saw the race; nor did the horse win.

IV

Mr. Black returned to Pretoria in pouring rain on March 8. He was tired and wanted to sleep. He meant to leave on March 11, show the world that London was only 10 days from Pretoria, and then fly on to Liverpool to back "Billy Barton."

A mayoral luncheon was given in his honour the day after he returned from the Cape, and for once I outwitted the efficient bodyguard. Heedless of the black looks cast in my direction, I inveigled my

millionaire prey to a corner. Now for it ! I wanted to know what he honestly thought of us, of his African flight, of anything he cared to talk about. If it were unflattering, so much the better from the news point of view.

" I'll tell you in a very few words," he said. " When I return to London I shall not fail to inform the Air Ministry about it all. You must have more air transport, for at present there are parts of Africa where ground transport is impossible. We came to Africa prepared for a swamp-ridden land. We have found instead a wonderful country and have been able to enjoy all the comforts of civilisation. We have slept under blankets and revelled too in a beautiful climate. There is very little information to be had overseas about Africa and I really cannot understand why England should devote her chief energies to Canada and Australia when your magnificent country is simply crying out for attention. . . ."

After lunch the stereotyped tributes were paid the guest of honour, while apples were furtively peeled and coffee silently sipped. Mr. Van Lear Black, I am sure, wanted to duck as each bouquet was thrown at him. He would have been far more comfortable facing an array of inquisitive directors and dividend-demanding shareholders.

He was called upon to reply. Applause, drowned in the reverberation of rattling crockery and jingle of cutlery, accompanied his movement to his feet. A last toying with a fork, a last tug at his collar, and he began :

" Mr. Mayor, ladies and gentlemen. You know I'm the worst at this kind of stuff that ever was . . ." (I had heard many worse at this " kind of [speech-making] stuff," on our public platforms.) He went on :

" Looking round this dining-hall, I see that I am probably the oldest man present. I have worked all my life from the age of eighteen, and believe I am entitled to see something of the world to-day. I will

not be doing a bad job—although I am said to be flying about in a palatial aeroplane—if by my flight, I am able to do something for the cause of commercial aviation. In America there are sometimes little scraps between Canada, the United States, Mexico and South America ; but nevertheless a network of commercial aviation lines has been established. Commercial aviation in the African continent, which is one of the most wonderful countries I have ever traversed by aeroplane or railroad, will link all the countries of Africa together, as it has done in America.

“ In South Africa the people are virile and delightful. Your potentialities are great. I would like to advise you to take heed of the words of your General Smuts—look north. After I return to London I intend flying to Tokio and also to South and North America and Canada. I would like nothing better than to have delegated to me the task of telling the world about Africa—South Africa. And I want to tell you that I am going to come back. . . .”

On March 12 Mr. Black motored to Zwartkop from his hotel where shoals of telegrams and letters had suddenly descended upon him. He had mentioned casually to the ex-Mayor of Johannesburg, Mr. Alf Law Palmer, that he might find room to take him to London, but the Mayor refused.

Hundreds of people thought that Mr. Black was looking for an extra passenger to make up ballast. They sent frantic reply-paid telegrams, saying they could come to Pretoria at a moment's notice if need be. Clerks in Durban, Cape Town and Johannesburg suddenly found that they had long leave due to them, or were ready to throw up their billets to aeroplane in luxury to London. Women were prepared to carry their wardrobes in a single portmanteau, like Lady Bailey. Business men found they could spare a few weeks from their offices and take Mr. Law Palmer's place.

Rene MacGoll had to deal with this telegram hurricane. If all these clerks and business men had but known that there was no room on the *Maryland* for another suit.

“Tell South Africa I am coming back,” said Mr. Black as I shook hands with him, “and as soon as I can.” The engine purred an invitation to him to enter the cabin. A westerly wind gave the air a nip. The League-of-Nations monoplane moved off, hoisted itself up, and was soon lost to sight. . . .

Mr. Van Lear Black did not see the Grand National run. (Those of us who followed his “Billy Barton” tip, learnt that even the information of millionaires is not infallible.) His pilots became ill *en route*. “Billy Barton” was classed among the also-rans, before he reached N'Dola.

On the last lap from Rome to London on April 5, engine trouble developed over the mouth of the Nervia torrent between Bordighera and Ventimiglia. Almost within sight of Monte Carlo, a perilous landing was made on a narrow strip of beach, and the waves of the sea washed the wheels as they came to rest. The flight was completed on April 8, 1929.

Mr. Van Lear Black continued his aeroplaning globe-trotting, but the Fates must have smiled grimly when he called out to me, “I am coming back. . . .”

A cryptic news item towards the end of 1930 told us that Mr. Van Lear Black had been drowned.

VIII

DUCHESS OF BEDFORD

Pilot at Sixty-two—Not Thrilled—A Hated Word—*Princess Xenia's* Failures—Robert Bruce and "Spider"—Record 10,000 Mile Indian Flight—Long Way for Easter Eggs—To Africa for Dinner—Famous Watch Mascot—Interesting History—Bad Weather—Bogged at Juba—Worst Trip of a Lifetime—Lost in Storms—"Che, Sara, Sara,"—Into the Press Pond—Films Wanted—Hunt for Lawless Chemist—Burglary for Duchess?—Africa's Blackest Mood—Down on Potholes—Croydon—Record Just Missed—Bouquets—The Reporter's Pride.

THE Duchess of Bedford was not "thrilled." If a newspaper wanted to annoy this sixty-four-year old airwoman, who gained a pilot's certificate when grandmothers of her age sat at home knitting, and comparing the jazzy futilities and cocktail stupidities of young Mr. and Miss 1927, with the golden (alas! so quickly forgotten) age of crinoline and pantaloons. . . . If, I say, a newspaper wanted to annoy her, it would just have to bury this short phrase in a long column—"the Duchess of Bedford was thrilled with her trip down Africa."

Eton-cropped, giggling young flappers might be "thrilled" by sailing through the clouds with a handsome pilot, after the humdrum routine at office or department store. The world and his wife might be informed by their favourite papers that they were "thrilled," when following the aerial exploits of a wealthy flying Duchess.

But the Duchess of Bedford herself hated the word—"thrilled." She would happily have erased

it from the *Oxford Dictionary*, and censored the papers that willy-nilly made her "thrill" a million unknown *bourgeois* admirers, or worse, "feel thrilled."

Journalists could say that the Duchess "enjoyed," "loved," "delighted in" . . . there were a hundred synonyms. Then one newspaper hit on an idea; perhaps the explanation. The Duchess did not like the word "thrilled," because the air had lost its "thrills" for her. It was quite wrong.

I know all this, because the Duchess read me a little homily on the subject when she came to South Africa. "I do not like to see my feelings expressed in that way—thrilled," she said. "Other newspapers have often done so; and one of them, knowing that I did not like the use of the word 'thrilled,' concluded that the air had lost its thrills for me. It is not that. I love these trips, but I just don't like the expression. . . ."

So you see I shall have to be careful when writing of the Duchess, to avoid like the plague, the hated word "thrill." . . .

Mary du Caurroy, Duchess of Bedford, was born at Stockbridge, Hampshire, in 1865. She was educated at Cheltenham College and Zurich, and when a young girl of seventeen, went to India, where her father, the Rev. W. H. Tribe, was made Archdeacon of Lahore. The story goes that in the late eighties, young Mary was the heroine of a ladies cricket match in Simla, when she flourished a vigorous bat and reached the half-century.

In 1888 she married Lord Herbrand Russell, then A.D.C. to Lord Dufferin, the Viceroy. When five years later her husband's brother died, he became eleventh Duke of Bedford. The succession to the duchy meant great wealth. As Duke of Bedford, Lord Russell succeeded to valuable estates in London, and Woburn Abbey, the family seat, with its beautiful parks and magnificent art treasures.

Both the Duke and Duchess of Bedford were keen

students of natural science. The Duchess, in later years, became a fellow of the Linnæan Society, whose studies are botany and zoology; a member of the Ornithologists' Union; of the Society of Radiographers, and other scientific institutions.

As enthusiastic at the age of sixty-two as Amy Johnson in her early twenties, the Duchess took up flying in 1927 in her sixty-second year, and qualified as a pilot after a short course of instruction. The first flights of any distance she undertook were from Woburn to Paris, Madrid and Tangier. A year later she looked further afield and planned a flight to India in a monoplane, the *Princess Xenia*, which she had purchased.

The *Princess Xenia* had an interesting, though rather unlucky record. It had been used in 1927 by Captain R. H. Mackintosh, a distinguished aviator and member of a night-bombing squadron on the Western Front during the war, and Colonel Fitzmaurice, an Irish airman, in an attempt to fly the Atlantic. After being in the air for 14 hours, they were forced by engine trouble to land on the Irish coast. Colonel Fitzmaurice later crossed the Atlantic in another aeroplane with two German airmen.

Later, in November 1927, Captain Mackintosh planned another non-stop flight with Bert Hinkler to India; but again the *Princess Xenia* was forced down, this time in Poland. When the Duchess of Bedford bought the monoplane, she had it thoroughly overhauled and fitted with new engines. As a pilot she chose Captain C. D. Barnard, who gathered aerial records with almost as much delight as a tomahawking Red Indian Chief gathered scalps for his belt. The Duchess's passion for flying equalled her pilot's unceasing hunt for records. "I like flying, and Captain Barnard likes records" . . . and that was all there was to the long and exacting flights she embarked upon.

One feat of endurance and skill accomplished by

Captain Barnard is probably still fresh in the public memory. A few months after his return with the Duchess of Bedford from a record African flight, he piloted a Puss Moth non-stop one day from Lympne to Malta—a distance of 1,400 miles, in 13 hours. He switched round and the next day flew back, again in one-hop, to England.

The first flight to India which the Duchess attempted in the *Princess Xenia*, failed at Bushire. But one failure did not deter her. Prompted no doubt by the story of Robert Bruce, she decided to rechristen the *Princess Xenia*, the *Spider*, to show that she was going to try again—until she succeeded.

On the morning of Friday, August 2, 1929, the *Spider* left Lympne once more in an effort to fly to India and back in a week. The first long hop of over 1,300 miles brought the Duchess to Sofia. Then Aleppo, Bushire, and the destination Karachi. The outward flight occupied three days, nine hours. On Tuesday morning, August 6, the *Spider* began the return dash, and the complete 10,000-mile flight ended at Croydon on the afternoon of August 9, three days thirteen hours later. No night flying had been resorted to; only hours of racing through the skies from dawn till dusk.

The Duchess of Bedford then looked down to the Cape. She would race there and back as well. . . .

II

Late afternoon of April 19, 1930. The sun, like a flaming ball, was about to plunge into the Atlantic ocean. A sky of rainbow colours was being painted by an unseen hand behind the Hottentots Holland Mountains. Cape Town had again been drawn to the aerodrome to meet an aerial record-breaker.

The Duchess of Bedford—she had carried out her resolve to fly to the Cape—had left Bulawayo early that morning, and was making the first non-stop

flight from there to the Cape, a distance of 1,200 miles. Tommy Rose, in a tiny aeroplane, was to do the upward flight from Cape Town to Bulawayo non-stop, the next year.

An evening newspaper, ready to be put to bed, waited impatiently for the Duchess's arrival. A reporter at the aerodrome spoke soothing words into a telephone receiver. He was trying to pacify the other end of the line with a solemn promise to "bung through" the news at least in time for the fudge—which is, for the information of the uninitiated, the stop-press column. He rang off.

A blob, buzzing like a bee, sprang out of nothingness shortly before six o'clock. It danced about on the gold-splashed horizon. Heads were averted. Ears pricked up in the strained attention of listening. The buzz developed into a distant roar, and the blob into a big fat dragon-fly. The roaring came nearer. The dragon fly expanded. Huge wings reached out on both sides of it. Big wheels and an undercarriage fastened themselves on beneath. The *Spider* was ready to glide over South African soil for the first time. Like an overgrown taxi, followed by a miniature whirlwind, it landed, nosed along the aerodrome, and came to a standstill with a final healthy snort of engines.

It was the snort of a satisfied defiance of the dangers of the air. The *Spider's* oil-bespattered body yielded up three heads and faces, incongruously goggled against the tearing winds. The heads and faces, which were attached to stiff, cramped-up bodies, respectively nodded and smiled. "What is the record out here?" demanded a voice from the *Spider's* inside.

"Thirteen days by Pat Murdoch," volunteered a mouth half-gaping still at the gigantic petrol-driven dragon-fly. "That was good," commented the voice. The tones of admiration were not unmixed with pleasure. The *Spider* had done something better.

It had broken Pat Murdoch's record by three clear days.

It was a long way to come for Easter eggs, but still there it was! When Captain Barnard left Lympne on April 10, he reckoned he could do the trip to the Cape in ten days. And he did.

The *Spider* with her crew of three, the Duchess of Bedford, Captain Barnard, chief pilot, and Mr. Robert Little, second pilot and mechanic, left Lympne thirteen minutes late. They had arrived there the day before departure, and slept during the night while mechanics went over every bolt and cylinder. There was a heavy cargo on board. Captain Barnard had planned an early morning bite in England and dinner at Oran, in Algeria. Nearly 400 gallons of petrol were poured in an endless stream into the *Spider's* tanks. The water tanks, too, were well filled in the event of forced landings in barren waterless wastes. Attaché cases and hat boxes were stowed away. Most precious of all, the Duchess's special camera was appointed to a place of honour in the aeroplane. That camera was to cost a certain reporter an hour of street-tramping and door-slaming in Cape Town! But I will tell the story later on. The Duchess was as keen a photographer as she was a scientist, and had an ever-growing selection of pictures taken on her flights.

Had you been at Lympne at five o'clock on the morning the Duchess left, your eyes would have alighted on the gigantic silver *Spider* gleaming in the light of the dawn. Its cosy cabin was about nine feet long. You would have been able to walk about in it with as much comfort as in the narrow railed corridors of a South African train.

Through the windows you would have seen two seats next to each other with two sets of controls. The arm-chair beside the window was to be occupied for many hours by the Duchess during the following three weeks. Then, if you had time for a more

detailed examination of the aeroplane before she soared away to Africa for dinner, you would have noticed a petrol tank on the gigantic wings, with a capacity of 185 gallons, and a massive undercarriage.

The start of the record down-and-up-Africa flight was, as I have said, thirteen minutes late. To be perfectly accurate, it was at 5.13 a.m., on April 10, 1930, that the *Spider* zoomed out into the fresh morning air and made eastward towards the sun-tipped hills of Kent. The monster dissolved in a few minutes into the little buzzing blob we saw dangling on the Cape horizon.

The choppy English Channel was taken in a stride, and the *Spider* raced on for the Pyrenees and the north coast of Africa, to Oran and dinner. Thirteen hours later it hovered over Algeria. Everything was going well. The Duchess's mascot watch, one of the most treasured articles, on board, ticked out its blessing on the trip.

The Duchess of Bedford would not have parted with that famous watch for a fortune. An explorer who flew across ice-bound Greenland had it first. He disappeared for months—but turned up again, smiling. Other aerial record-breakers had fondled it in their aeroplanes as though their lives depended on its safety. They got through. It had passed into the hands of the Duchess and accompanied her on her successful flight to India. Altogether it had been on more historic flights than any other watch in the world. Only one minute a year it was said to lose. . . .

The *Spider* was wheeled out on to Oran aerodrome on April 11 in pouring rain. It seemed that the low-lying clouds which embraced the earth would pour out their rain for weeks. The *Spider* was pelted for 400 miles, but then the weather cleared beautifully, and the 650-mile hop to Tunis was completed in six hours. Longer flights followed.

One thousand miles in 11½ hours brought them to Benghazi on April 12; nine hours the next day over

the Pyramids and hostile country, with the Duchess occasionally taking the controls, saw them at Assiut ; another dawn departure on Monday, April 14, and nine hours' flying carried them to the R.A.F. aerodrome at Khartoum. On they went to Juba with its sodden mud-caked aerodrome which clung to the *Spider's* wheels. In vain the engine roared and strained. The wheels remained helpless in an obstinate muddy grasp. Natives worked to free the aeroplane from the bog. The Duchess was half-sorry when the heaving black bodies triumphed over the uncompromising bog.

The student of botany and zoology was stirred by the silent vastness and magnificent wildness of the surrounding country, and wanted to linger at Juba. The fellow of the Linnæan Society fought with the aerial hustler, whose *Spider* ate up the miles of continents with an unending appetite. The hustler won. And Captain Barnard made for Dodoma.

III

While the setting sun was giving Table Mountain its last golden kiss a few days later, the Duchess of Bedford told me why she made a regretful departure from Juba.

" I probably enjoyed the great stretches of forest land more than the pilot and navigator," she said. " I had none of their anxiety when rough weather was met. I saw a great deal of big game—elephants, sable antelope, and impala. Captain Barnard saw a lion so clearly that its mane was quite visible to him. I did not see it, but later on I also saw a ' kill.' I should have liked to stay longer at Juba. It was all so wild there ; and I believe lions come within a few yards of the place. Nobody could have been kinder than those who entertained us on the trip. It was a much more difficult route than the one we followed to India, although the stages were not so long. . . ."

Leaving Dodoma, their next hop was to Broken Hill, and it was from there to Bulawayo that Captain Barnard experienced the worst trip of his life.

At first, the wheels of the monoplane sank into the mud of the Broken Hill aerodrome, and they could not get away. The trouble at Juba was repeated. Thirty burly natives, singing snatches of song, heaved in unison. The *Spider* was released a second time.

When she rose into the sky, the rain battered down in terrifying solid sheets. The pilot groped blindly along his path. He eddied down lower and lower to the flooded country-side, skimming tree tops, until he was within a few feet of the ground. The gale lashed itself into greater and greater fury, as the *Spider* whirled heroically along. So near was the aeroplane to the earth at one time, that Captain Barnard glimpsed water-lilies on patches of river.

He made for Livingstone and the Zambesi, but saw neither. Hemmed in by unending clouds, he lost the way. The Duchess guessed as much, but did not worry the anxious pilot. Her motto was "Che, Sara, Sara," ("What will be, will be"). Being a fatalist, she waited calmly to see if the elements would allow them to get through, or force a landing in Rhodesian bush-country through lack of petrol. "If I always worried about the prospect of forced landings," she used to say, "I would not enjoy myself."

Livingstone and the Zambesi were blotted out. They passed over the mighty river but did not see it. The patches of river they noticed did not seem to them to be the Zambesi. Varnish was beaten off the propeller. Perhaps the mascot watch of the Duchess of Bedford, which had been on many such adventures, again brought them good luck. Captain Barnard struck the railway line and the *Spider* limped on to the Bulawayo aerodrome on Friday afternoon, April 18.

It had been a terrible strain on Captain Barnard, keyed up to the highest nervous pitch in the howling gale, lost, and with two lives, besides his own, dependent on his good judgment and luck. His iron nerve sagged a little. The reaction on him was so great, he confessed afterwards, that he was unable to look at an appetising meal, although nothing had passed his lips for a whole day. He went straight to bed and nightmares haunted him till morning.

And so it was that the great non-stop flight from Bulawayo to the Cape began on April 19, the tenth day from London. Clouds followed them at first, but over Kimberley at noon, the weather was clear. . . . The *Spider* landed at Maitland after 100 hours in the air. As if to show that sixty-four could stand the strain of 10 days' flying as well as twenty, the Duchess disdainfully ignored the small stepladder offered to her to dismount, and sprang with agility from the cabin. She was tall and erect, the people saw, and travelled in a brown coat and scarf. Binoculars which had been trained on every object of interest down Africa, were strapped round her neck.

Even as she was welcomed and presented with a bouquet of wild Cape flowers, a telephone mouthpiece was being told of the fastest London-Cape trip yet. A man in shirtsleeves in a newspaper office held a receiver with one hand, and scribbled with the other. Five minutes later compositors were hammering the story into type. Telegraph operators were calling London. "Bedford arrived *Spider* six to-night," ran the cryptic cables making one word do the work of three. "Non-stop 1200 miles ex-Bulawayo," they went on.

In London the words dropped into the Press pond and worked out in ever-increasing circles.

The compositors of London's evening papers were setting up the news while Cape Town read it in suburban train and jolting bus. "Flying Duchess arrives at Cape," shouted the posters and headlines.

“ Another Aerial Record ” ; “ Hundred Hours From London to Cape.” The Duchess of Bedford drove off quietly to an hotel nestling beneath Table Mountain, and prepared for a return on Monday.

She had run out of films for her camera. The shops were closed in Cape Town on Saturday night. She mentioned it to a young reporter who spoke to her. “ I'll get some for you,” he volunteered, little dreaming of the trouble his good deed would cause him. He went off for the films. Exactly five minutes later he knew that all the chemist shops in the city were closed, and that under some antediluvian law, chemists were not allowed to sell camera films on Sundays either !

Determined not to disappoint the Duchess, he pressed the “ night ” and “ emergency ” bells of several chemist shops. To some doors shuffled men annoyed at being called from a newspaper, chat, or game of bridge. Other doors stood rudely closed, insensible to the impatient prodding of electric bells. The doors which did open, disgorged upright, law-abiding chemists. They were suspicious. It was against the law to sell films until Monday morning. Would the reporter pay the fine if the illegal sale were discovered ?

Did he say the films were for the Duchess of Bedford who was leaving early on Monday morning ? Well, that was interesting. But the law made no distinction between Duchesses and common or garden picknickers ! Even if a chemist told a Magistrate that the films were for the record-breaking Duchess, a fine would still be imposed.

So the reporter went filmless from shop to shop, disgusted at finding in succession so many honest and law-abiding chemists in Cape Town. He considered breaking into a chemist shop and taking the films by force ! That tickled his sense of humour and news. It would be a great story, if he did. He pictured, as he tramped along, a startling caption—“ Reporter

Burgles For Duchess." He overcame the temptation, and next morning coaxed a friendly chemist into wrapping up a roll of precious films behind a battery of scent bottles and chlorine water, and handing them over the counter as bandages!

On the Sunday night, the reporter, like a good scout, delivered the films. The Duchess had been out that day on a 90-mile trip round the Peninsula. What a reserve of energy the cheery old lady had.

IV

The Easter week-end in Cape Town; two days before May Day in England. That was the ambition of the Duchess of Bedford when an overhauled *Spider* uttered a challenge to the mist-veiled mountains of the Cape at dawn on Easter Monday, and departed for London.

They went hotfoot after the record. Once more the African continent was in its blackest mood. The weather was filthy. Except in the desert, smitten with eternal heat and drought, it rained. Still the race through cloud-swept skies proceeded, and the *Spider*, like the fabled wearer of seven-league boots, laughed at distance. Captain Barnard watched the thousands of miles of Africa slip away. The Duchess took over the controls for intervals of an hour. When she was not piloting, or peering down from her arm-chair, she pumped petrol from the tank on the wing into the consumption tank. She was by no means only an arm-chair passenger.

Eight days from the Cape, at Dragoman, the *Spider's* engines for once ceased firing, and Captain Barnard saw beneath him an area punctured with pot-holes. Landing skilfully, as though on a billiard-table surface, he sought feverishly with Mr. Little for the fault. Each precious minute spent on the pot-holed "aerodrome" meant the slipping away of the record. The source of the trouble was located,

and remedied. To ensure a safe take-off from the uneven broken land, the spare petrol tank was drained. When Sofia was reached, Captain Barnard had fallen slightly behind his nine-day schedule. The record he had set his heart on had just eluded him.

On the morning of April 30, the last lap of 1350 miles from Sofia to Croydon began. Twenty-five minutes short of 12 hours later, the *Spider* was nearing home. A little machine ascended from Croydon aerodrome and cut capers in the sky with belching exhausts. B-R-A-V-O were the letters the onlookers saw fashioned in smoke against the heavens.

The *Spider* and her crew, oppressed by a tropical heat a few days before, now pinched with an intense European cold, had returned. A thousand voices took up the simple welcome that had melted into a ragged column of smoke. "BRAVO."

In 200 flying hours spread over 21 days, the Duchess of Bedford in her famous *Spider*, conqueror of three continents, had flown down and up Africa. Sir Alan Cobham's time was 175 hours, but his trips were spread over 101 days.

Gathered in the Croydon airport hotel, the happy crew listened to a welcome by Sir Sefton Brancker. "We are all very proud of these three," he said. "This flight is the best thing in civil aviation I have known in the last three or four years. I express my gratitude to you, as Director of Civil Aviation, for the example you have set us and the things you have proved for civil aviation."

The London *Times*, generous in its praise of the pioneers who met with more success than its own Vickers Vimy expedition, said in an editorial on the flight :

"She (the Duchess of Bedford) and her shipmates have the distinction of having flown to India and back, and to the Cape and back within a far shorter space of time from start to finish, than any other

human beings. . . . It is, of course, specially remarkable that so soon after her record-breaking journey to and from India, this second feat of pluck and endurance should have been accomplished by a woman. Not the least astonishing feature of the two performances is the accuracy with which in both cases she reckoned the exact time which would be needed for their accomplishment, and it was cruel luck that on the eve of complete success, a trifling mishap should have upset her calculations and prevented her from reaching home 24 hours earlier than she did. . . .

“The courageous enterprise of a woman has set out to prove how much smaller the gap between the ends of the Empire has recently become. In that attempt, thanks to the air-worthiness of the *Spider* and to the skill of her fellow-pilot and navigator, the Duchess has triumphantly succeeded, making no more fuss about it than if she had travelled to Edinburgh and back in the ‘Flying Scotsman.’ . . .”

The Duchess of Bedford slipped quietly away to Woburn Abbey. She had proved that it was possible to triumph at express speed over Africa's vilest weather, in a serviceable aeroplane, navigated by an experienced pilot. In the 21 days that she raced up and down the continent, a business man from Johannesburg could only have made a single trip to London by train and boat. Those were the days before the Imperial Airways services.

She was glad that she had achieved a flying record, not because she wished to be styled a “record-breaking-flying Duchess,” but because she had strengthened still more the belief of the Air Ministry in commercial aviation from England to the Cape.

A few weeks later, the reporter, who had tramped the streets of Cape Town in search of a lawless chemist, received a note from the Duchess of Bedford. She had not forgotten to thank him and to send an autographed photograph. The reporter still cherishes

that letter and photograph. They have been framed, and now, safely glassed from the grimy fingers of over-inquisitive visitors, gaze from a place of honour on a sitting-room wall. He would have tramped the streets cheerfully all night, even given way to the impetuous thought of burglary, if that had been the price of the Duchess's little souvenirs.

That is all I have to tell of the Duchess of Bedford, the oldest pioneer who flew to Africa. If anything I have written causes her displeasure, at least she cannot accuse me of linking her name to the tabooed word—"thrilled."

IX

LIEUTENANT R. F. CASPAREUTHUS

Béauvais Horror—As the R 101 Crashed—Record Again Attacked—Weary Wait—The Nearest Pub—Paragraph to Poster—Duchess's Record Goes—Diamonds by Air—Gliding at Wasserkuppe—German Efficiency—No Palaver, Please!—Fateful Parting—Sir Sefton Brancker's Letters—Recognising Athens—Bitten Alive—Four Hours Sleep a Night—8,000 Miles in 76 Hours—Praise from Kidston—Fitting Reward—Piloting First Air Mail from Cape.

EARLY on the morning of October 5, 1930, a poacher was setting his snares on a little copse beside the village of Beauvais in France. It was a cold misty, rainy morning. Dark clouds hurried after one another overhead.

Suddenly above the crash of bough on bough in the swirling wind, and the rustling of the last autumn leaves, came a new note—a deep growling note. The poacher looked up and saw a great sky ship. Little pin-points of light came from it showing that there was life, human beings, aboard her. He watched the ship sail into the wind, then suddenly lurch, stagger, and crash earthwards.

Flames spouted from the airship's body when she touched the ground. There was a great rending sound. The poacher fled from the awful scene, scared that his law-breaking might be detected. Within thirty minutes cable-lines right round the world were humming with the news of the crash of the R 101, the greatest tragedy that had befallen British aviation.

If that startled poacher, scurrying away homewards, had looked upwards, some time later, he

might also have seen between the rain clouds another, but tiny, aeroplane battling with the high wind, and then pass away southwards into the mist.

It was bound for South Africa. In the cockpit was Lieutenant R. Caspareuthus, ("Caspar" for short), late of the South African Air Force. He was piloting a three-seater Puss Moth, to be delivered to a Port Elizabeth flying enthusiast, and bent at the same time on breaking the record from England to the Cape.

A week and a few hours later, a solitary car waited patiently at the Maitland aerodrome, Cape Town. Behind the car was the spreading bulk of Table Mountain, silhouetted against the rays of the setting sun. To the occupants of that car, the beauties of Table Mountain were of little interest. They peered over towards the Hottentots Holland Mountains, for a tiny speck that would gradually increase, throw out wings on either side, and spread out into an aeroplane.

The shadows lengthened and the wind blew eerily round the corrugated iron hangars. No plane came. One of the women in the car turned to her companion. "No, I am afraid he won't be here to-night," she said. "I had such a feeling he would arrive to-day." It was Caspareuthus's mother who spoke. With a mother's intuition she had felt her son would be home that night. She was wrong. The car reversed, turned towards the main road, and sped back to Cape Town which was already waking up into winking eyes of light.

It was the following afternoon. The scene was Maitland aerodrome again. Wind, dust, and scudding clouds. In the background Table Mountain, a hangar, a photographer. "Like all these airmen never up to time," drawled the photographer wearily. He propped himself against the side of the hangar, and surveyed the cars coming up the rough road to the aerodrome and depositing their loads of men and women. "Yes, just like all of them, always behind

schedule." An audience, stifling involuntary yawns and glancing at wristlet watches, nodded assent.

The afternoon wore on. The Mayor of Cape Town sent out a deputy to welcome the airman. But even by the time the Mayor arrived, "Caspar" was miles away. Then came news: He had been delayed at Beaufort West and could not arrive in Cape Town for another hour.

"Where's the nearest pub?" demanded a disgruntled man, who looked as though he had been interrupted in the middle of a drink. A companion pointed to a knot of buildings in the distance. "Well here goes," he exclaimed, suiting action to the word. A number, nothing loath, followed suit. A procession of cars hustled along to the hostelry.

Pacing up and down in front of the little office on the aerodrome, I talked to "Caspar's" tall and well-built father. An inventor himself, and designer of a new type of aeroplane propeller, Mr. Caspareuthus spoke half-proudly, half-apprehensively of his son's adventure. "Caspar's" departure from London a week before had been told in a brief paragraph. It had been pushed into an obscure position by a newspaper make-up man duly impressed by the magnitude of the R 101 disaster, and the dashes to Australia that were then littering the Croydon-Port Darwin route with a crop of wrecked machines and battered hopes. Brief news came from Khartoum. With a telegram from Pretoria that morning, "Caspar" became a bill story.

"It is just like him," his father told me. "He has kept us all in the dark and intended this as a surprise. We have heard nothing from or about him since he started his flight, except in the brief paragraphs in the paper. But he'll break the record alright, trust him. In his last letter from England he said he would be here for my birthday on Wednesday."

Then "Caspar" came. Out of the north rushed a plane, grew in size and swept on the aerodrome

while those who had migrated to the pub comforted themselves over their drinks. "Caspar's" family, a few intimate friends, a pressman or two, and one cinematograph man were all who welcomed the bronzed figure that stepped out of the machine. The rest were also-ran. "Caspar" in a small machine had broken the record of the Duchess of Bedford.

II

That night Caspareuthus had a good sleep. He needed it. Next day, he told his story. It was as modest and unpretentious as the log of an unloquacious sea-captain. "Caspar" saw nothing romantic in a flight down a continent, yet many authors had written books on less exciting themes.

Let me fill up the gaps, take you right back to the beginning and try to give some adequate picture of "Caspar"—brother aviator of Murdoch and of Flight Lieutenant Tommy Rose, who followed him the next year. They all defied loneliness, sleep and the dangers of the whole African continent.

Born in Cape Town on May 9, 1899, "Caspar" was educated at the South African College School. The glamour of sailing the skyways enthralled him early. In 1924, he joined the South African Air Force and for five and a half years, was one of their most efficient pilots.

He was chosen to carry diamonds from the State diggings in Namaqualand to Cape Town. Every week with mail-boat regularity, "Caspar's" plane carrying a rich freight, sped over the barren lands of the North-West Cape Province, and brought the gems in safety to the office of the Government diamond valuator. He was fellow-officer at Zwartkop to Murdoch and Bentley, and like them, found that the S.A.A.F. offered little scope for advancement.

On June 5, 1929, he resigned his commission. Just then, Major A. M. Miller, the pioneer of commercial

aviation in South Africa, was collecting a little band of dare-devil pilots to fly the air mail day in, day out across the Union. To "Caspar," weather conditions meant nothing. He won through even the worst of storms and always delivered the mails in time to catch the weekly mail-boat for England. Then he went to England for a holiday. With Mr. R. H. Marshall, a young fire assessor of Port Elizabeth, he was to have made the trip, buy a plane, and fly back. Marshall wanted an aeroplane for business journeys to all parts of the Eastern Province. But the two friends were unable to make the trip together. Business detained Marshall. "Caspar" went alone.

From England came fragments of news about him. A gossip writer learnt that "Caspar" was in Germany at Wasserkuppe, the world's training ground for glider experts. There he attended the International Gliding Meeting and took a course. Let "Caspar" describe to you what gliding and gliding training is like.

"The method of training is the last word in German thoroughness," he says. "The discipline at Wasserkuppe is methodical. The pupils work from dawn to dark. There is a break at midday for lunch. Pupils attending the course are divided into groups and all instruction is given in German. In my group there were several Englishmen and we were lucky to have as a fellow-pupil a professor who interpreted each of the lectures. Initial instruction is devoted to lectures on the theory of flight—chunks of it—meteorology, clouds and the effect of land contours on wind currents. They have reduced gliding to an exact science.

"Then comes the actual glider training. Each pupil is first sent off on short trips, a few seconds at a time. It is the ideal method for teaching a man to fly. Once the pupil takes his place in the glider and is shot off the ground, he has to work and think for himself. He has no instructor to tell him what to do if he makes an error. When the pupil shows signs of

efficiency, he goes off on longer hops, and is eventually shot off the top of a hill. It is remarkable how soon people with the requisite air sense grasp the principles of gliding.

"Finally come soaring flights. I ask nothing better than a sail-plane and favourable currents. That is real flying. Gone is the roar of the engine. Instead I ride on clouds!"

Riding on the clouds above the chequered German landscape "Caspar" nursed the germ of a great adventure. South Africa's gliding pioneer would ride down the skyways of Africa alone. Marshall agreed to his suggestion that he have a shot at the record. Surely a South African should hold the down-Africa-flight record, whereas it was then held by England, and by the sixty-four years old Duchess of Bedford at that.

•III

"Caspar" left Lympne in his Puss Moth named the *Springbok*, while journalists and officials were searching in the charred wreckage of what had been the R 101. He told no one of his plans. He just hopped off in spite of discouraging weather reports from the British Air Ministry, and headed towards the Channel.

"I have been twitted about keeping the flight so secret," he said the day after he reached Cape Town. "But I wanted to do the thing first, and avoid all fuss as much as possible. That I reckon is how every airman wants to do these things and my trip was marked by a total absence of any palaver." It was. At most of his landing places there was no one even to meet him.

Tucked away in his suitcase in the *Springbok*, were two letters, one for Mr. J. G. Francis, the Director of Civil Aviation, and the other for Captain P. Lindup, secretary of the Union Civil Air Board. They were signed by Sir Sefton Brancker. "Caspar"

had a long chat with Sir Sefton who was then making his last preparations for a trip to India. The two wished each other luck and went their ways—Sir Sefton to the R 101; “Caspar” to bed and an early start in the morning.

About eight o'clock on the morning of October 5, “Caspar” was battling low against the wind and mist. He passed over Beauvais. Beneath him lay forty-six bodies; while in his suitcase were Sir Sefton Brancker's letters, the signatures scarcely dry.

“Caspar” fought on against the wind and reached Le Bourget at 8.45. Only there did he learn of the tragedy of Beauvais. The weather closed in on him. Black rain clouds swirled overhead, and he could not make an immediate start. He had intended heading for Pisa. That was out of the question. At noon the weather improved and “Caspar” was off. His objective was Marseilles. Weather conditions were still atrocious on that October Sunday, but a training in South Africa against the wild Cape southeasters stood him in good stead. In the afternoon he reached Marseilles and went to bed early. Next day he hopped over to Brindisi. Tuesday saw him at Athens. There, if he had been able to keep to his schedule, he would have gained a day. As it was, he judged it too late to cross the Mediterranean. He kicked his heels round Athens for some hours, and recognised the famous city from the pictures that adorned the walls of his old class-room.

Wednesday was the first of the really trying days. “I flew direct from Athens to Cairo,” ran his own story. “I started in the dark and when daylight came, I was out of sight of land. It was a new experience for me to fly over the sea, and it was a very eerie feeling. For the first time I felt rather lonely. I remained out of sight for five hours and was glad when I had made the crossing.”

While thousands paid homage to the R 101 victims as they lay in state, Lieutenant Caspareuthus arrived

in Cairo. He had been four days on the flight. Then he undertook his longest flight. Early in the morning he sprung off from the landing ground at Cairo for Khartoum. It was blindingly hot when he got there. "The heat was so terrific that I was doubtful of making a good take-off," said Caspareuthus describing that inferno of a Thursday. "But the machine rose without the slightest trouble, even with a full load of fuel supplies."

The strain was enormous. "Caspar" did all his own starting and refuelling. There was no one to help him. He estimated that he had only four hours' sleep a night during the whole trip. Sorely in need of rest and sleep one night, he chose a native hut as his hotel. He was nearly bitten alive. Language difficulties, too, stumped him. He had to make himself understood to Frenchmen, Italians, Greeks, Egyptians, and the education of the average South African includes few, if any, of these languages.

IV

"Caspar" triumphed over all—sleep, heat, refuelling, language difficulties. The *Springbok* clove its way down the air lanes of Africa, unimpeded. Gone at last were the tenacious winds of the Continent and the Mediterranean. They gave way to the glaring heat of the Equator. Melut and Entebbe, lonely little places, heard the roar of his machine; saw it descend for a few hasty hours; and then fly off again. He neared ground he knew better. After Entebbe, came Victoria Nyanza. He passed down the west bank of the great lake, slipped past Tabora, and came to Abercorn, in the topmost corner of Northern Rhodesia. It was the seventh day, and his unheralded journey was a record-breaker—if all went well.

He refuelled at Abercorn, and came to Broken Hill in the last minutes of the Saturday, before a swift

African dusk blotted out the landscape. The last news of "Caspar" was from Khartoum. There were worried hearts in Cape Town that Saturday night, for Central Africa is a huge place, and a tiny plane can go amissing so easily. The news service from Central Africa was still imperfect. He might be all right.

Next day nothing was heard either. Out of Africa there is little news on a Sunday, as Kidston knew to his cost when stranded at Lichtenburg. Yet quietly on that Sunday afternoon, the *Springbok* taxied on to a deserted aerodrome at Pretoria. There was not even an arrest awaiting him; no snip-snapping Press photographers, with "Just-a-little-this-way," or "One-minute-please." This cold welcome at his old headquarters was just what "Caspar" liked. He put up at Pretoria for the night, and made arrangements for the delivery of the letters from Sir Sefton Brancker. On the Monday morning, when "Caspar" was well on his way southwards, Mr. Francis opened the letter that had been penned nine days ago in London. Sir Sefton wrote that he hoped to come out on the Imperial Airways service and see his old friends in Pretoria!

Headwinds met "Caspar" in the Transvaal, and his petrol sank low. He landed at Beaufort West, refuelled, and started off again. The crowds were already assembling at Maitland while "Caspar" kept low over the country, speeding towards his goal. When the wind became troublesome, he turned the *Springbok's* nose skywards, and flew over the Hex River Mountains at a great height. He swooped down towards Maitland.

The faithful dozen were waiting for him in the cold. News had come through from Beaufort West that he could not arrive before half-past six. But, when least expected, he came out of the blue. A thrilling climbing turn, a dive down over the aerodrome, another low sweep round, and he landed after

a ten-hour flight. He had beaten the record. It was dusk on the ninth day from Lympne.

Next morning, "Caspar" satisfied an inquisitive Customs Department, counted his collection of foreign coins, (which had somehow or other trickled into his pockets, as he passed through the different African countries), and paid a visit to his ~~old~~ school to give an account of his adventures.

This is a summary of the record-breaking flight.

Left Lympne on October 5.

Reached Cape Town on October 13

Distance 8,000 miles.

Flying time 76.50 hours.

Carried 40 pounds weight of luggage.

Average speed 105 miles an hour.

Add to these figures a constitution that could stand just four hours sleep in 24, a retiring disposition, and grim, dogged courage, and you have the essentials of a down-Africa-record-breaker—Lieutenant Caspareuthus.

His record was to stand barely six months. It was eclipsed by Glen Kidston in his Lockheed-Vega; but "Caspar's" was no mean part in the opening up of the trans-African air route. Of him Kidston said with typical generosity, "My flight is not to be compared with that of the South African, Lieutenant Caspareuthus, who came through alone in nine days, and with a very much slower machine."

His appointment by Imperial Airways as one of their pilots for the African airway service, was a fitting reward. As dawn broke on the morning of January 27, 1932, he steered the *City of Karachi* Londonwards from Cape Town's airport, Wingfield, with the first South African-Europe air mail in history—17,000 letters and fifty pounds of fruit and flowers from the Government to the Union High Commissioner in London.

Good Luck, "Caspar!"

FLIGHT LIEUTENANT THOMAS ROSE

No Panegyrics—Or Imperial "Tripe"—Hitting Palapye-Road—Beer and Forgot It—Daring Plan—To England in 4½ Days—"High Test"—At Full Moon—Another Dawn Patrol—Sailmaker's Needle—Burn a Joss Stick—1,200 Mile Hop—Misfortunes—Headwinds—Stranded—Good-bye to Record—Shake on It!

NO more unlucky men than Pat Murdoch and Tommy Rose ever tackled the great Air Adventure of Africa. Rose's ill-luck, probably, has meant that you will have heard little of him, and seen no banner-headlined panegyrics of his flying. Yet for all this lack of fame—but let me tell you the story of Tommy Rose.

Flight Lieutenant Thomas Rose, D.F.C., was an airman by trade. A youth when the World War began, he won a fair amount of distinction by his work over the enemy lines. With peace he turned to civil aviation, and the post he occupied at the time of his flight was that of air representative of the Anglo-American Oil Company, a subsidiary of the gigantic Standard Oil Company, of New Jersey. He was one of that small body, the Gosport A 1 instructors, a peerless cross-country pilot, and a stunt artist of outstanding ability. When I first met him he had done 8,200 hours of flying. There are not a hundred men alive with that record. Indeed, Rose possibly had higher qualifications than any other pilot who had flown to the Cape.

But he remains in my mind as the most modest, too, among the big pilots. "No fuss," was his watchword. "Don't let anybody throw a long line of

Imperial tripe about me," he slangily phrased his aversion for publicity to me once.

Thus it was in the Rose fashion that a single-seater Hermes Avian Sports sneaked away from Lympne aerodrome, Kent, on February 11, 1931. Few people knew that its unflamboyant take-off spelt the beginning of still another attempt on the down-Africa record. Extraordinary precautions had been taken to prevent news of the arrangements for the flight getting into the London newspapers before the actual start. I had learnt before then that Rose was planning the flight; for a correspondent had cabled a week before giving brief news of it.

Soon, however, Rose was caught in the news-net. The ubiquitous Reuter picked him up at Lympne just as he left on the lap to Rome. The Press message relayed through London, revealed that his intention was to break the existing record—"Caspar's" eight and a half days.

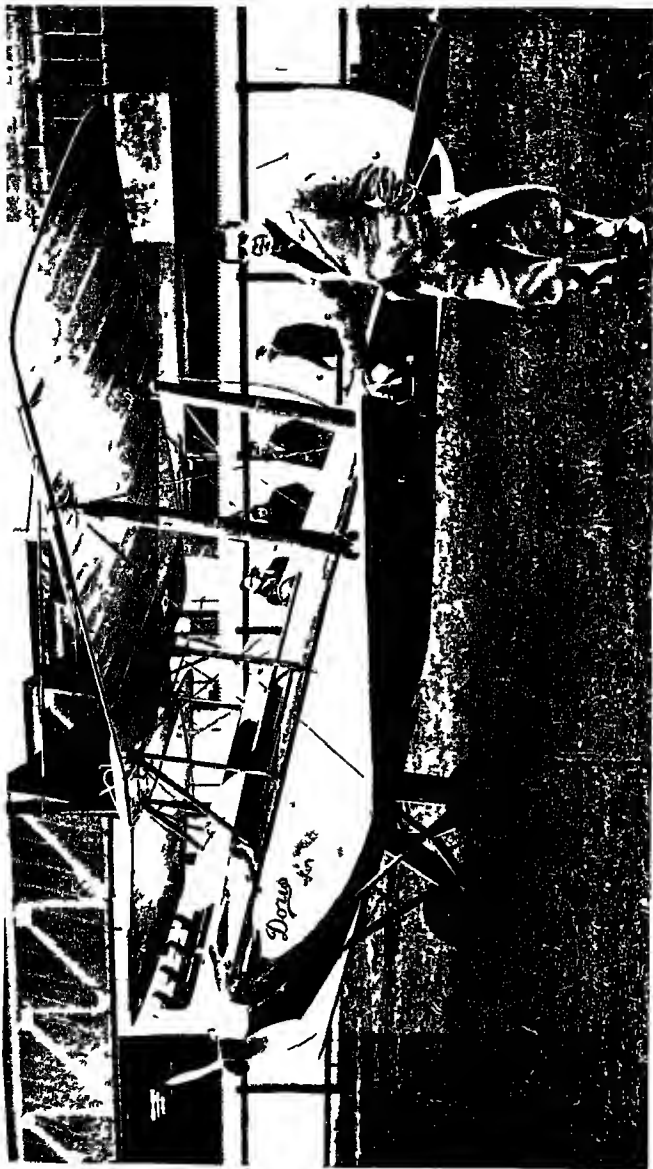
He reached Rome at 4.35 p.m. that afternoon, slept the night, and left for Tripoli at 7 a.m. next morning. Slight anxiety over the wires marked this hop, for at five o'clock in the afternoon he had not arrived, and watchers feared that he had come down in the Mediterranean. He told me, nearly two months later, that he had flown for hours over the sea in driving mist and rain squalls, often only a score of feet above the lift of the storm swell.

"I flew in terror," he confessed. "I was really frightened. I don't think that I ever suffered so much mentally in the whole of my career. My first dawn patrol was nothing beside those hours over the Mediterranean. I sang 'Nearer, My God, to Thee,' 347 times on that crossing—and I am not exaggerating."

But he got through safely at 5.45 p.m., and next morning he was off on the lap to Benghazi. Cairo, Khartoum, Juba—the romantic place names associated with other flights before him, tell the tale of



MISS PIGGY SALAMAN



KOY IUCN I I

his steady progress southwards. He landed at Khartoum at the sunset of Sunday, and at dawn on Tuesday he spurred Juba away from his undercarriage wheels and was off for Kisumu and Bulawayo.

All along the down-Africa line slight delays occurred to check his speed. Here it was difficult to find the fuel-supply man; there an odd job had to be done. By the time he reached Bulawayo, the capital of Southern Rhodesia, it was noon on Wednesday, February 19. He had been more than eight days on the flight. Caspareuthus had landed at Cape Town on the ninth. He had a bare chance of succeeding. But the joss of ill-luck won. With Bulawayo behind him at 2.30 p.m., Rose hit Palapye-Road just after five o'clock—and hit it hard. His landing wheels struck an ant-hill, one of those concrete-like mounds of sun-baked earth that crop up all over the veld landscape, and he narrowly escaped disaster. His plane careered on and smashed through a barbed-wire fence. He had to telegraph Bulawayo for a mechanic. Captain R. Smith, of the Rhodesian Aviation Company, set off with an engineer and spares in a plane the moment the telegram came through.

The damage, though, proved too serious to be put right on the veld. Rose dragged a weary way into Bulawayo, his hopes dashed, and cabled to England for a new undercarriage. That alone could enable him to see the flight through. For seven weeks he waited for that undercarriage. A mishap in Africa is no mere matter of moments. "If my chance of breaking the record had still been more than a chance," he told me, "I should have been furious. But as it was, I just had a glass of beer and forgot about it."

Poor Tommy Rose! He kicked his heels in Bulawayo, longing to be in the air again, but knowing that he had failed. Even the congenial company of the Rhodesians, ever ready to drink sun-downers

with a stranded stranger, failed to restore his happiness. Not that he let them know it. He was of the type that is always over-brimming with cheeriness.

Meanwhile Lieutenant-Commander George Pearson Glen Kidston, millionaire and sportsman, swooped down Africa in a flight that is still a sensation. He smashed the record by landing at Cape Town just six days and ten hours after he had left England. Tommy Rose was forgotten.

Kidston side-slipped his giant Lockheed-Vega monoplane down to the aerodrome at Bulawayo, then within reach of the record he coveted. Rose was one of those who met him there and renewed his old friendship. Kidston went on, and Rose remained. It is true that he had to wait but little longer; Glen Kidston reached Cape Town on a Monday, and on the Thursday of the same week Tommy caught up with him.

One of a thrilled crowd, I stood on Maitland aerodrome as the sun sank over Table Bay, and saw the triumph of Kidston. He was cheered wildly. The newspapers gave him streamer headlines. Sub-editors in St. Georges Street sat in vigil with telephones at their ears, ready for the "flash" message that they could "full-rate" to Fleet Street. Yes, Kidston had arrived.

On the Thursday afternoon I saw the landing of Rose. "Keep an eye open for this fellow Rose," a news editor had said to me. "I suppose we must say something about him."

II

I drove out to Maitland that afternoon, and turned in to the aerodrome for a minute or two. Climbing out of the car, I saw a dot on the blue silk that was the sky above the Hottentots Holland Mountains. It was Rose. Three other men were on the aerodrome—an officer of the South African Air

Force, on duty over the planes that carried diamonds from Namaqualand; one business man; and Mr. Frank Solomon, a pioneer of flying in Africa, who had forsaken the air to run a service station at a seaside resort on the Cape coast.

A little red plane dropped out of the sky and ran along the sun-browned turf of the aerodrome. A man in shorts and sports jacket switched off the engine, clambered out of the solitary cockpit and twisted into a smile a mouth stiff with the cold of high altitudes. "Hulloa, chaps," said the mouth. Tommy Rose had arrived, though nobody seemed to care a great deal.

I had a word with Tommy on his experiences flying down to Cape Town from Kimberley, the diamond city. He had nothing of interest to relate beyond the fact that he had been bumped up and down in one long aerial toboggan ride.

"What's a good pub to put up at?" Rose asked me. He had come friendless to a strange town. I suggested the Queen's Hotel, where Kidston was staying, and Rose drove off there to soak in a stinging hot bath.

Next day he came into the city to drink tea with me. He still wore khaki shirt and slacks and a shabby sports coat. The liveried commissionaire at a café door looked askance at him as we joined a crowd of thin-voiced, pomaded youths who were sauntering in to hear the latest jazz inanity snarled by Africa's most blatant saxophone. Rose didn't give a damn.

Over that cup of tea Rose evolved a daring plan, to fly back to England in four and a half days—48 hours less than Kidston had taken on his dash out from Netheravon.

"I want to do something good on the way back," he declared. "If I had broken the record to the Cape, I should have made £2,500. But rewards are not everything. My bus is called *High Test*, after

the name of the spirit I am selling in Britain. I should like to see *High Test* get a bit of credit for good work done.

"I fancy . . . yes, I think . . . I can get to England in four and a half days. With all the luck in the world, that is. I think I can take a chance on my luck this time. I am really lucky; at least, I always get away with it when misfortune happens along. Something usually goes wrong at the last trick, though. If I reached Rome on the fourth day on my way back, and was just making the English coast on the fifth, a seagull would probably dash into my propeller and smash it. Tommy Rose would be saved all right, but his record would be lost.

"I see no reason why I should not reach England in four and a half days. Kidston did it in six and a half, and he never flew at night. I shall have to fly by night. So keep an eye open when the full moon comes along. But meanwhile, mum's the word."

So it was announced that Rose was making tentative plans to lower the Duchess of Bedford's home-bound record of 10 days.

The full moon came, and with it word from Rose. My telephone rang at 5 p.m. on April 30. "Rose here," said a voice. "I'm shooting off at three o'clock to-morrow morning, old chap. Coming to see me off?" That was all.

At this hotel that evening Rose showed me his maps and outlined his schedule. With me was a lawyer who insisted on telling Tommy that he was bound to break his neck. Rose coolly bet a sovereign that he would get through safely. At nine o'clock he went off to get some sleep. He planned to fly for 14 hours next day and reach Bulawayo in one hop from the Cape, a feat never before accomplished. I envied him rather, for a moment, because my lawyer friend and I were drawn into an interminable argument on India with a gentleman who introduced

himself as a "membah of the Empah Mahkhing Bohd."

By the light of the full moon a few hours later I watched him leave on his flight, possibly the most daring African air adventure ever attempted. At 2.55 a.m. the five men and three women who had gathered to see him off in the cold of the autumn night, grew a trifle flurried. "Isn't he coming?" they asked. "Where can he be?" But Tommy slipped into the aerodrome quite unruffled at 3 a.m.

He looked to his plane, shook hands, and clambered into the cockpit. He was the calmest man there. "Look after my kit, Cathcart," he said. "Right you are," said a slightly built man. This was Lieutenant O. Cathcart-Jones, Kidston's staff pilot, who had come over in the millionaire's record-breaking Lockheed-Vega. Cathcart-Jones was sailing for England in the Union-Castle mail steamer next day, and taking Tommy Rose's gear home with him.

Rose in the cockpit of *High Test* switched on his engine to hear the unfaltering roar of its cylinder explosions. The Hermes engine broke into life at the first swing of the propeller. Rose let it rev up for five minutes. "After so many years—a dawn patrol again," he said. "Burn a joss-stick to the great god Luck for me."

He taxied slowly to the far end of the aerodrome in the beam of a motor-car's headlights. The car turned and raced across the aerodrome. *High Test* followed it. Then, a vague silver ghost in the fitful light, it braced its wings against the upward thrust of the air, and swept into the sky.

The eight people on the aerodrome sighed with relief that he had got safely off the ground. Only once before in the Cape had a civil airman flown by night. That was when a Mr. J. Williamson, engaged to fly an illuminated aeroplane over a tattoo given

by the Grenadier Guards, had crashed in thick mist and turned his bus over in a somersault.

Rose was attempting a feat far more hazardous than a solitary flight. I reflected on it as *High Test* wheeled up into the sky, crossed the face of the moon, and lost itself to sight in two minutes. The roaring of the engine came thinly from above for many minutes as Rose climbed higher and higher to cross the Hex River Mountains.

III

Flying alone, he was trying to smash a record set up by a monoplane that cost £6,300—nine times as much as his. By the light of the full moon each night, he was to go on flying where, before him, all airmen had descended to sleep at jungle aerodromes.

Sleep was his chief enemy. To succeed, he had to spend 78½ hours in the air, with only 20½ hours for rest, and ten more for five rigorous inspections of his engine. He was to keep himself awake by laving himself with eau-de-Cologne and breathing deeply of a smelling-salts bottle. When the desires of the body drugged with sleeplessness demanded that he should doze, he was going to jab his thigh sharply with a sailmaker's needle.

The dangers of falling asleep in the air were undisguised. Wartime airmen will tell you stories of a patrol machine that glided down to land behind its own lines after the pilot, with the joy-stick still in his hand, had died of wounds. But Rose could not hope to land safely in his sleep where rivers and jungles and snow-capped peaks tore up the contours of the Central African "no-man's-land." And if his engine failed—but he felt it could not fail.

"I am certain I can get through if my engine can; and my engine has never let me down yet," he had impressed upon me. "I've been a pilot since 1916, and I've put in 8,200 flying hours. I have never once

had engine failure in the air." I think I know the reason why. As Captain Ball, the war V.C., was reputed to do, Rose knew, loved, and doctored every nut in his engine himself.

Could Rose do it? He had given me this startling schedule to show his plans:

- Friday, 3 a.m., leave Cape Town.
- Arrive Bulawayo, after flying 1,200 miles, 3 p.m.
- Two hours for the engine; five for rest.

Friday, 10 p.m., leave Bulawayo: Saturday, 10 a.m., arrive Tabora (Tanganyika); refuel with 40 gallons of petrol, and straightaway fly on 400 miles to Kisumu.

Arrive Kisumu 5.30 p.m., Saturday. Engine two hours, rest 8½ hours.

Sunday, 4 a.m., leave Kisumu; fly 1,250 miles over the Sudd to Khartoum; arrive Khartoum 4 p.m. Engine two hours, rest six hours.

Sunday, midnight, leave Khartoum; fly to Cairo, 1,086 miles; reach Cairo midday, Monday. Engine two hours, rest two hours. Leave Cairo 4 p.m.

And then on by moonlight across the Mediterranean to Rome—1,400 miles with dangerous sea-flying.

Arrive Rome Tuesday, 6 a.m.; check over engine, rest an hour, and off on the last lap non-stop to London.

If he were to reach London, according to plan, at 6 p.m. on Tuesday, May 5, Rose would have beaten Kidston's outward record by two days and the Duchess of Bedford's homeward record by six days. He would have flown 7,500 miles in 78½ hours.

Kidston, in a monoplane with a cruising speed of 150 miles an hour, had been only 56 hours in the air. But Rose's plane could only average 100 miles an hour. It was a fine plane for all that. Its sister

ship, the only other of the type built, was *Southern Cross, Junior*, Kingsford-Smith's record-breaking "bus." It had a range of 1,600 miles, possible by reason of an extra-large petrol tank holding 111 gallons. That was 200 miles more than the longest single hop he had planned for himself, the hazardous 1,400 miles across the Mediterranean from Cairo to Rome.

So Rose was speeding northwards, while the sun rose and tipped the wings of *High Test* with a red glinting light. When Professor Piccard explored the upper air in a sealed cylinder in May, 1931, he carried with him, besides an array of scientific instruments, brandy and sandwiches. When Tommy Rose dashed away from Maitland aerodrome, he carried dozens of caviare sandwiches, a flask of iced black coffee, another of orange juice, and two hundred English cigarettes. Nibbling at his first caviare sandwich, he breakfasted on that May morning somewhere between the Hex River Mountains and Beaufort West. What did he think of as he made for inaccessible horizons, cramped in a few inches? Perhaps of his engine, his two-year-old kiddie and wife in England, his work. Many a bearded unromantic farmer on the veld heard the drone of Rose's plane wax and wane, gazed from his work to the sky, and probably thought, "another of these mad-brained flying men."

Rose raced on towards Bulawayo. That afternoon, when the hordes of coloured newsboys had broken loose on the streets of Cape Town yelling the news of the secret departure, I waited for tidings of *High Test*. They came. A telegram from Bulawayo, despatched at 4.17 p.m. said: "Rose reached here." Tommy Rose had not failed. He was one precious hour behind schedule, but he had created a record hop from the Cape to Bulawayo.

A phlegmatic sub-editor stood by me, waving another full-rate telegram from Bulawayo. "Cancel

previous message," it said. Some wandering Rhodesian plane, apparently, had flopped out of the blue on to the Bulawayo aerodrome, and an enthusiastic Pressman had sent off a wire post-haste to Cape Town, only to find that Rose was still somewhere down South—lost, crashed perhaps. Damn it! A brief paragraph announcing the arrival of Rose at the end of his first hop already stared blackly from isolation in a strip of white that was the late news column of the paper. That was that, anyhow. Perhaps we would hear later how the crash actually occurred.

The automatic telegraph tube suddenly shot out another message. Even as we were doubting, a message had been morsed from Bulawayo and flashed along a subterranean path from the Post Office to the newspaper offices. It was authentic news. Rose had made Bulawayo at 4.35 p.m. Hop Number One up Africa was, after all, successfully accomplished.

IV

For the next four days news filtered in, in dribs and drabs. In Bulawayo, we learnt, Rose immediately set to work on his engine. Volunteer mechanics busied themselves on a rapid overhaul. He snatched a few precious hours of sleep. Sleep. That was the real danger, not the jungles.

At 11.30 the second night, just after the huge moon had reared itself in the sky, Tommy Rose left for Tabora. This time it was real all-night flying. And a difficult job, too, with nothing but a compass to guide him, and a speedometer to tell him the rate of progress. His start from Bulawayo was 90 minutes behind schedule, and he had not yet found the following winds he expected when approaching the Equator. A tiny crowd shivered in the cold as he streaked into the moonlit sky.

On Saturday Rose refueled Tabora. He had intended to refuel with forty gallons of petrol, and, without any sleep, soar off on the four hundred miles to Kisumu. But he had arrived too late to assure his getting to Kisumu before nightfall. Instead, he slept again at Tabora and tinkered with the engine.

Then away to Kisumu early on the Sunday morning, May 3. Hours later a weary figure, wearing grey flannel trousers, a red woollen sweater, white canvas shoes but no socks, hatless and unshaven, clambered out of the cockpit of *High Test* at Kisumu. There was little time to devote to the engine. There was less time for sleep. The sailmaker's needle would have to be vigorously prodded. He left Kisumu at 11 a.m. He was seven precious hours behind schedule. His object was Khartoum over the impenetrable sudd of the Nile.

But more bad luck was in store for Tommy Rose. Winds continued against him and he had to break his flight at Juba. He could not go on that night either. There was some more sleep for him, not the sleep-dispelling needle. Next morning he departed for Kosti, on the white Nile, and Khartoum.

Great dust storms next checked him. "Nearer my God to Thee," Tommy Rose may have hummed again, as his plane struggled heroically against the blast. It was swept back, nevertheless, and Juba saw them both once more. Two hours later Juba was left behind a second time.

Rose remained at Kosti for nine hours, and pushed on from there at 3.30 on the morning of May 5. He hit Khartoum one and half hours later. It seemed, at that stage, as though the record would evade his grasp by a few hours. To beat Glen Kidston's time he would have to be at Croydon the next day, Wednesday, May 6. But unless a strong following wind came to his aid . . . well, he had passed the worst part of the up-country flight, and that was something to be thankful for.

Between Kisumu and Malakal, then left behind, was no place where he could have landed without serious results. The earth was a jumble of hills, rocks, sudd and thick scrub, without a level patch or bit of clear ground to afford a natural aerodrome. This was the part that the late Air Commodore C. R. Samson, who led the annual R.A.F. flight to the Cape and back in 1927, described as by far the worst of the whole route.

A mixture of good and bad luck had brought the lone flyer to Khartoum at dawn on May 5. He took the air for Cairo at 5.30, having spent 30 minutes resting. After Cairo would come the hideous 1,400-mile night hop across the Mediterranean to Rome, and the last leg from Rome to Croydon.

He need not have troubled to work out the schedule. Flight Lieutenant Tommy Rose, tired, weary of the sport of misfortune, with nerves sorely frayed, was forced to land at Esna, 30 miles south of Luxor. Engine trouble developed and he was left stranded. . . .

Thus ended the dash of an airman who had, with Lieutenant Pat Murdoch, the dubious consolation of knowing he was one of the unluckiest aviators ever to come down the African skyways. "If I were just making the English coast on the fifth day," said Rose in Cape Town, "a seagull would probably dash into my propeller and smash it. . . ."

On the day of Rose's mishap, Lieutenant-Commander Glen Kidston and Captain Gladstone hurtled to their death on the Mountain-of-the-Little-Teeth, in South Africa, and ironically enough, dynamited him once more out of the news. That day, too, Flight Lieutenant H. R. D. Waghorn, the twenty-seven-year old winner of the 1929 Anglo-Italian Schneider Trophy Race, was seriously injured in an aeroplane accident at Farnborough, England, and died later. He jumped from a machine which got out of control in a high wind, and struck the ground with

some force before his parachute had taken the burden.
. . . A black day for aviation!

Help was sent to Rose from Cairo and he made his way back to England, taking with him letters still stamped, "Cape Town to London by air mail with Tommy Rose in the *High Test* in six days."

That is the story of Tommy Rose. Tommy Rose and Pat Murdoch, you can shake on being the unluckiest pair of Africa's pioneers.

LIEUTENANT-COMMANDER G. P. GLEN
KIDSTON

Millionaire Adventurer—His Ideals—Remarkable Career—Man of Nine Lives—Torpedoed—Into a Hedge at 95 m.p.h.—His Boat Breaks—Winner of Grand Prix—Premonition of Disaster?—From Beyond the Grave—"Wake Up England"—Super-Postman—To Cape in 6½ Days—Dispute With Imperial Airways—Fresh Worlds to Conquer—Big Ideas—And Swirling Dust-devils—Reported Killed—Mountain-of-the-Little-Teeth—Archie's Portrait—"Fight the Good Fight"—By Boat Indeed!

LIEUTENANT-COMMANDER GEORGE PEARSON GLEN KIDSTON was a very rich young man. He came of a well-known Scottish family which established the firm of A. G. Kidston & Co., metal and machinery merchants, in Glasgow, over 100 years ago. This flourishing business had been managed by five generations of the family in direct succession. In addition he had interests valued at about £50,000 in the Clyde Shipping Company and life policies of £18,000.

Yet, in spite of his wealth he did not seek the inanities of sun-baked millionaire-ridden beaches at the Riviera, the smoke and tipsy chatter of cocktail bars, or the excitement of the gaming temples. The adventure and peril of land, sea and sky were his breath of life.

Barely a year has elapsed since Glen Kidston strode along to the desk at which I worked in the *Cape Argus* offices. I glanced from a paper-strewn table to notice the four-square-to-the-wind figure, a little inclined to burliness, the bulldog jaw and clear open face. He sat down opposite me—this man who was

a millionaire, submarine officer (one time naval cadet), high-speed motor-racer, big game hunter, traveller, yachtsman and trans-African airman; the man of a hundred adventures and a hundred escapes from death, who the previous day had completed an England-Cape flight in six days and ten hours.

That was one dull April morning in 1931. Even in the face of the tributes that then came avalanching over the cables from England's national dailies and public men, Kidston preserved his usual modesty.

We sat and talked amid the clash of typewriters, impatient ringing of bells, and all the cacophony that is the office of an evening newspaper. Doors banged, messengers scampered to and fro with copy, telephones thrilled imperiously. Kidston didn't mind. He fitted himself into that atmosphere as he did into everything else.

"When do you think you'll be putting in a run at Brooklands again?" I ventured after the preliminary sparring.

"I can't say," replied Kidston, screwing up his eyes in that curious little way of his. "I drove in the Bentley team and they are not racing for a year. I expect they will be next year, though."

"Do you prefer flying to motoring?" I bawled next above the clatter and clamour.

A pause. A little consideration. A final screwing up of the eyes. Then, "No. Flying is not as exciting as motoring, more particularly road racing. There you have the thrill of jockeying with the other drivers, cornering. In flying you just sit still for hours on end. But there is more to flying in the way of development. Motor racing is just sport. You see it's like this. . . ."

For the next half-hour I listened to the ideals, the secret dreams, the fears of this amazing man. England was lagging behind in commercial aviation, he complained. American enterprise was leaving her

"stone cold." He pencilled rapidly on a scrap of paper. There. That was the network of Empire airlines he wanted to see within the next few years; and those the times between the capitals. But he was afraid that— Oh, if there were only another Rhodes in these days of aviation! He would jolly soon wake them up in England. Meanwhile he hoped, he was going to do a little propaganda and development work himself. Yes, it was like that. . . . Quick staccato sentences of a man who believed passionately in all he was talking about.

A month later an express train moved with funereal pace into the Cape Town Railway Station. An escape of steam. It stopped. Relatives embraced one another and hurried off. Porters shouted invitations to their respective hotels, baggage men scuttled hither and thither, waiting for tips like manna from heaven. Then as the crowd thinned out along the platform, and the jamboree of tongues died away, from out the cavernous van came two brown coffins.

On one was a small silver plate inscribed, "Captain Thomas Anthony Gladstone, A.F.C., died May 5, 1931, in air crash, Afgunst, district Harrismith, South Africa." On the other, "Lieutenant-Commander George Pearson Glen Kidston, R.N., died May 5, 1931, in air crash, Afgunst, district Harrismith."

All that was left of the body of Glen Kidston, battered to death when his plane was snatched in a whirlwind and dashed against the Tandjiesberg—the Mountain-of-the-Little-Teeth—lay in one of those oaken caskets. Only a month had passed since I had seen him, full of vitality, a millionaire who had come to South Africa at amazing speed and was planning to bring new life to the Dominion's airlines. He was dead.

II

Thirty-nine days before, this man who in his life-time laughed at death, had stepped into his £6,000 Lockhead-Vega monoplane at Netheravon and streaked off on an attempt to reach the Cape in six days. What a life he had had, this child of fortune, who scorned to spend his days in sheltered security or reckless extravagance.

He was born in London on January 23, 1899, the eldest son of Captain A. Glen Kidston (one time of the Black Watch), of Gwernyfed Park, Three Cocks, Breconshire. Educated at Ludgrove, New Barnet, and admitted to Osborne in 1912 and Dartmouth in 1914, he joined the Navy at the outbreak of war and was drafted to sea as a naval cadet in the cruiser, *Hogue*. Adventures came swiftly upon this lad of fifteen. His ship was torpedoed by a German submarine in the North Sea on September 22, 1914, and he was buffeted about in the sea for over two hours before being rescued.

After internment in Holland, he was repatriated and transferred to the battleship *Orion*, of the Grand Fleet, which survived a heavy shelling at the battle of Jutland. He served on the *Orion* until made acting sub-lieutenant in July 1917 and then went in for submarine duty.

Here are his other exploits in the Navy, snapped :

February 1920. Promoted lieutenant. Joined L 24 at Portsmouth, after which he was on L 3 in China.

Autumn 1923. Joined cruiser *Dauntless* and made a voyage round the world in her. Later appointed to X 1, largest completed submarine.

December 1926. Obtained command of submarine H 48 at Portsmouth.

1928. Promoted Lieutenant-Commander and retired from Active List, his last ship being the aircraft-carrier, *Courageous*.

In 1920 Kidston took an interest in motor-cycling and the next year represented Great Britain as an amateur motor-cyclist in the Anglo-Dutch trial. He had many hair-raising escapes from injury and death during his next few years of racing, but nevertheless competed in motor-cycle races in England and France in 1924, and other speed trials and hill climbs in England. One of his closest shaves was in August 1928 when, while travelling at 95 miles an hour in the Ulster Tourist Trophy Race, he ran into a hedge.

Tabulated, the other exploits of Glen Kidston during a few breathless years, seem like the diary of an adventure-story hero.

1927. Speeding at 50 knots in his motor-boat in the Solent when it broke in half. He and his wife were in the water half an hour swimming for their lives.

1927 (towards end of the year). Began flying lessons at Hamble, near Southampton.

1928 (April). Took pilot's licence and bought number of light aeroplanes.

1928. Second in both the International Grand Prix at Le Mans, and Irish Grand Prix.

1928. Flew to Kenya in the Fokker from which Captain Alfred Loewenstein, the Belgian financier, vanished while crossing the Channel. Was forced down on the White Nile with Mrs. Bentley as one of his passengers.

1928. Shooting in Central Africa, secured the world's record oryx beisa measuring $40\frac{1}{2}$ inches and a record gerenuk measuring 162 inches. Was charged by a rhino which he shot dead at two yards' range.

1929 (November). Was passenger in German airliner which crashed in flames at Caterham. The sole survivor of eight passengers. He put out his flaming clothes by rolling on wet grass, helped in rescue work, and then took a short flight with a pilot from Croydon, "to steady his nerve."

1930. With Captain Woolf Barnato won the Grand Prix at Le Mans. In this 24-hour road race they covered 1,831 miles at average speed of 76 m.p.h.

1930. Took part in an expedition to Central Africa to photograph wild animals from the air. In July had a successful exhibition of his films in London. . . .

In the thrust and parry of airy conversation, Kidston once said : " I shall not get ' written off ' in a car or a plane. You see, my front teeth are too wide apart. It's a sign of good luck. I'll die in bed. Until then I'm not worrying."

Secretly though, did he have a premonition of death some time soon? On the night of May 6, while experts were theorising on the cause of his plane's crash on the Tandjiesberg, Lady Windham, his mother, and Mrs. P. P. Curtis, his sister, searched among his papers and found a sheet of notepaper. On it were the words, " If anything happens to me, I want the simplest of services with no fuss. There must be no regrets, for I have had a good and thrilling life."

And then another letter was found, marked, " To be opened in the event of disaster." This is what Kidston wanted to say to England from beyond the grave :

" I attempt this (African) flight with a definite object in view. I feel British commercial aviation is, from a variety of causes, a long way behind the present standard of international commercial aircraft. That our military aircraft is a long way ahead of any other nation, must be ample proof that we are capable of producing the world's best commercial aircraft. Our successes in the Schneider Cup emphasise this. The general public do not unfortunately appreciate the future that commercial air transport must play in regard to the British Empire and Imperial communications.

The whole world laughed at railways and steamships and history, as always, repeats itself.

"In years to come it appears to me that air transport will play a very important part in the blissful state of what we are pleased to term 'modern civilisation.' I do not sympathise with those ostensibly patriotic citizens who reassure themselves that all is well with the Old Country. It is not at all, all well with the Old Country, as far as commercial aircraft or its operation is concerned. We must get busy and adopt a more progressive attitude, otherwise the history of the American invasion of the world's automobile markets, will repeat itself in the aviation field. We have a great potential industry in our grasp, and yet we do not appreciate it. The British Empire's prosperity was not founded on these lines.

"Whatever the result of my attempt or efforts may be, I rest content if I feel that this effort is one primarily instigated to awaken our country to a situation it plainly does not appreciate. If this flight could be done in a British aircraft it would not be attempted, because it would merely be proving a performance which palpably was possible. I maintain, however, no British commercial aircraft is at present in existence capable of the same performance as this American product (the Lockheed-Vega), and there ought to be. There is the demand. There is the need. A strong man is wanted to arouse our activities in this sphere and I fear also in other directions. Whether my efforts succeed or not, I trust the object is appreciated. . . ."

III

Still, there was no sign of any premonition of disaster on the face of Kidston as on a dark Tuesday morning, March 31, 1931, he spoke into a talkie

"mike" and left Netheravon on his flight to Cape Town.

"We are the laughing stock of the world," were his last words to England. "It is up to the Post Office and the Air Ministry to do something about the air mails; and I hope my flight will show how terribly backward we are." He shot off.

Followed a breathless week for Kidston, Lieutenant O. Cathcart-Jones, and Mr. Hills, the mechanic, on board the monoplane which sang an unfaltering song of power over crowded Europe and the swamps and jungle-land of Africa.

That Tuesday Kidston saw Naples and dived down for the night. Next day he was off again, struck thick fog between Naples and Sicily, and had to keep low down almost touching the crests of the waves with his wheels. He called in at Malta, and pushed off for Cairo. On Wednesday afternoon he arrived at the Halfar aerodrome.

The same day Charles William Scott, a former Royal Air Force pilot, six foot tall, started from Lympne in an attempt to break Kingsford-Smith's 237 hours' record to Australia.

At Cairo, Kidston dispensed with his wireless set. "I left my set there because I had to consider the question of weight," he explained, "and also because the organisation of stations through Africa is not yet sufficiently complete to have made my set worth while."

He was to regret his action later when stranded at Lichtenburg, close to a wireless station. Then he was isolated from the world. The risk he ran was great, but could anything happen to a man of nine lives?

So while Scott raced across Europe, "lucky" Kidston tore down Africa without wireless. At dawn on the Thursday the Lockheed-Vega started on the longest hop of the trip, 1,600 miles to Malakal. This deadly stretch that had been the ruin of the hopes of

so many trans-African flyers, was child's play to the American monoplane. Malakal, jungle-encircled, heard the roar of the great plane in the afternoon. It had averaged 145 miles an hour during the 12-hour hop. Kidston, revealing himself as a super-postman as well as record-smasher, delivered a copy of *The Times* a few days from the press, to the Governor-General of the Sudan.

Next day he made Kisumu. At Bulawayo, he had been five days on the way, covered 6,000 miles, and the Lockhead-Vega was running as smoothly as ever. The six-day record was almost achieved. . . .

Meanwhile, almost directly across the world to the west, a tiny motor-boat skimmed down the Parana River in a cascade of foam, turned in a swirling wash, and sped away up again at the same spouting speed. Slowly it came to a standstill. A greasy and water-bespattered face peeped over the rail. Off came the goggles. Kaye Don, speed brother of Kidston, was also record-breaking. He had for the first time in history, travelled on a watercraft at 103.49 miles an hour. It was another triumph for Britain. . . .

Kidston was scheduled to arrive at Cape Town on the Sunday afternoon. The weather at Cape Town was bitterly cold, and there were threats of a bus transport strike. Yet golf parties were broken up, family visits disbanded, and all flocked to Maitland to see Kidston come. At four o'clock a big plane dropped out of the air and bumped along the ground towards the crowd. People rushed forward. But it was not Kidston. An hour passed. Some of the less patient spectators made citywards. "Here he comes," then cried the clear-sighted ones. They pointed to a little speck in the sky. Eyes strained towards it, trying to metamorphose that speck into the plane from England.

"It's only a kite," piped a small boy, breaking the spell. It was. Spectators once more drifted away, wondering where the airman was. . . .

Kidston was fretting on a lonely farm at Lichtenburg, inaptly named "Goedvoornitzicht" (Good Prospect). The previous night he had landed at Bulawayo and made his second mail delivery. It was a letter from Miss A. Anstruther, a Bulawayo girl, acting in *The Song of the Drum* at Drury Lane, to her parents. When they opened the letter, a newspaper cutting and photograph of their daughter dropped out. . . . The date was Saturday, March 28, exactly a week before. Bulawayo was left early on the Sunday.

Flying over the serrated face of the Transvaal, the note of the Lockheed-Vega's engine changed from its high regular note, and spluttered. Kidston resolved to land. Heavy rubber wheels skimmed the ground, bumped about, swung round to avoid an anthill, and crashed through a wire fence. It was hardly "Good Prospect" for Kidston, as he jumped out to survey the damage. A nick had been taken from the propeller by the wire, the plugs were sooted, and bulbous anthills stood up all around like miniature mountain ranges. The plugs did not take long to clean. But the anthills; they were a different matter.

It would have been fatal to attempt to rise off such a runway. South African hospitality came to the rescue. From eleven in the morning until four in the afternoon, natives, turned out by the owner of the farm, dug and levelled, and filled up the ground until a long runway was made. Kidston was unable to send out a message of his whereabouts. He had jettisoned his wireless, and the telephone offices were closed. . . . Just then the cables from Karachi to England were announcing "Great" Scott's arrival there slightly ahead of Kingsford-Smith's time. . . .

At four o'clock, the Lockheed-Vega bumped over what had once been a colony of anthills, and shot up into the air towards Pretoria. The anthills had

spoiled Kidston's ambition—the six-day flight to the Cape. From Pretoria that evening a message was sent to Cape Town of the mishap.

Kidston then saw a possibility of even a seven-day flight disappearing. Early on the Monday morning, the Lockheed-Vega again proved skittish. The engine refused duty. Greasy hands coaxed and cajoled her. A short circuit was found to be the cause of the trouble. Only at eleven o'clock did she speed along the green sward of Zwartkop. Up she went, just clearing the hill. The tail tilted. She righted herself and disappeared southwards.

At 5.5 p.m., half an hour before the latest bulletin suggested Kidston could possibly arrive, a great gleaming bird roared out of the north, circled in triumph in the shadow of Table Mountain, and turned back to Maitland. Kidston had covered 7,505 miles in 6 days 10 hours—two days better than Caspareuthus.

Slightly deaf from the roar of the engines, Kidston gave his message to the Empire :

“ If I can carry through a single trip like this as a private owner without proper organisation, it must stand to reason that a commercial company operating the same route with relays of machines should be able to do it much quicker.”

It was a message that inspired the leader writer in England to lyricism. Next day, while Kidston quietly recuperated in the Queen's Hotel overlooking the Atlantic rollers, the editorial chorus re-echoed in millions of homes.

The tenor of the *News Chronicle* sang rapturously :

“ A piece of sheer bad luck prevented Commander Kidston realising his ambition to fly from London to the Cape in six days ; but he has done quite enough to prove his point. Whether the Post Office will be impressed remains to be seen ;

but undeniably the public is very much impressed and quite rightly. Private enterprise has never scored a more startlingly sensational triumph."

More restrained were the bars of *The Times* :

"The flight is a very fine feat, but should not be used to press criticism of the African service beyond legitimate bounds. Reliability is at least as important as speed in the carrying of mails. . . . The difficulties to be overcome in maintaining a regular air service that will run to time over such a route, with all the variations of African weather, that must be taken for granted, are serious. What Commander Kidston has done once on a special demonstration flight, cannot be done every time. But, so long as that consideration is borne in mind, his flight should give a strong stimulus to the development of better and faster mail services. It is a pity, when the world's air speed record, like the motor-car and motor-boat records, is held by Great Britain, that this record flight to Cape Town should have been accomplished in an American aeroplane. The machine is, however, of a type that has been well tested on fast mail routes in the United States, and is therefore one specially suited for the flight. The fact that it is a foreign machine, should give added point to Commander Kidston's demonstration."

The *Morning Post* harmonised :

"A truly remarkable performance. . . . Commander Kidston's performance suggests that the eleven days' schedule of Imperial Airways might now be somewhat reduced at the start without reducing reliability."

Letters, telegrams, cables poured in on Kidston. Small telegraph boys cursed the name of Kidston, as they pedalled pell-mell out along the long road to the

Queen's Hotel, then back again to the Post Office, only to be confronted with yet another snowstorm of congratulations. To such enormous proportions did his mail grow, that he had to appoint a Cape Town journalist as secretary.

One of the cables was from Croydon, and read: "Congratulations from 'Caspar,' Johnnie and boys at Croydon—Caspar." Another was from Sir Malcolm Campbell. "Heartiest congratulations. Stout fellah," it said.

•
IV

Busy days followed for Kidston. He elaborated his text and there followed a remarkable exchange of opinions between Kidston, on the one hand, and Imperial Airways on the other—Kidston, with his desire to show up "the awful slowness of the air-mails," and Imperial Airways, with the knowledge they had gained through hard experience and thorough calculation.

The following extracts show briefly the main points of the argument that, in Cape Town, almost overshadowed the more pressing interest in the bus-strike, and in the outer world, caused reorientation of ideas about air services.

"I have proved that it is possible to run an air mail service between England and Cape Town in six days," said Kidston. "However, I must frankly admit that from the point of safety a three-engine machine is required. My machine is not one with which I would care to run a regular passenger service. Air mail matter, however, is a different proposition. The analogy is that of a freight train and a passenger train.

"I made my flight to the Cape with two definite objects. I want to investigate the possibilities of the internal development of aviation in South Africa, and to demonstrate to the general public

in Africa that there is absolutely no reason why the air mail service should not be considerably speeded up. I have, I think, convincingly proved the latter.

"It is not my intention to belittle the work of Imperial Airways, but I am convinced that the carrying of air mail and passengers are two different propositions. Imperial Airways labour under the difficulty of carrying both, which means they have to travel at the pace the passenger desires.

"At the present moment, there are two weeks' air mails from Kisumu on a service opened about a month ago, lying on the jetty at Kisumu, and there is no machine to take them off. I mention that to show the people here that, though the Airways claim reliability, they have not in point of fact demonstrated that reliability. . . .

"Fast machines, capable of carrying good loads of air mails, are needed at the present stage of aviation development. Imperial Airways, however, have gone the other way about. They are catering for heavy loads—passengers and mails—loads that are not offering to-day. I have seen and studied the trend of aviation in America and Germany. In both these countries air mails and passengers come under two different services, they have decided for technical reasons that two types of machines are essential, and they have progressed very considerably.

"It may be of interest to point out that liners carrying mails across the western ocean are carrying them faster than Imperial Airways do on the Indian route. The liner speed averages $28\frac{1}{2}$ knots, while that of the Imperial Airways' machines is 28 miles an hour. . . .

"Air transport is going to play a very big part in the future of the world and to the people of vision there can be no doubt about that. . . ."

Imperial Airways were not slow to reply.

“Kidston’s flight has been heralded as an example of how air mail services should be operated,” they declared. “When flights of this kind are successful, one is apt to forget for the moment the risks involved, and Commander Kidston’s record flight to the Cape is comparable only with such records as various successful Atlantic flights, and other dashing feats such as the Duchess of Bedford and Captain Barnard’s flight to the Cape and back. To compare it with commercial air service is putting it in an entirely wrong perspective.

“In the United States, there are mail-only services which have been in operation for some time, and many people imagine that the United States is a network of mail-only night air services. Actually, that is not the case, and, in fact, the United States are rapidly changing over to combined passenger and mail service.

“These mails-only services of the U.S.A. are the envy of a number of enthusiastic Britishers who, in all good faith, consider that the system should be copied *en bloc*, so to speak, and applied to our Empire services. For a variety of reasons—the high relative cost and the small capacity of the planes, the selective nature of traffic, and, if single-engined planes are used, higher insurance—these mails-only services are very costly per ton a mile. And the higher the speed the greater the cost. In fact, the cost varies as something between the square and the cube of speed.

“The British policy has always been to combine passenger and mail services, and the advantages are that a larger unit of the fleet, and therefore a more economic unit, can be used. Now, in America, the usual example held up—mails-only services—are confined to what they call domestic lines.

“ On American international lines such as those to Mexico, Panama and down each side of South America, the services generally are weekly and a few bi-weekly in frequency and are all combined passenger and mail services.

“ At present in the United States there are flown 69,000 miles per day of combined mail and passenger services compared with fewer than 6,500 miles of mails-only services.

“ Reverting to the Africa service, on which limelight is for the moment directed, it must be remembered that surface transport facilities throughout most of the route are exceedingly undeveloped. The Governments which are contributing to the cost of the service require, and are paying for, a combined passenger and mail service, of which passenger facilities are of great importance.”

In the heat of the controversy plans were announced that, independently of Kidston's achievement, a fleet of monoplanes was being ordered to speed up airmail services in the Empire, and “ Great ” Scott reached Port Darwin in record time. Before Kidston were spread all the allurements of the African sub-continent. He was fawned upon, sought after. But another record did not turn his head nor change his nature and love of high adventure.

He cast round for fresh worlds to conquer. He looked at South Africa—and found it a good field for propaganda. With all the impulsiveness of his nature, thinking nothing of personal gain, he planned greatly and daringly. Away up in the north men delved deep in the earth in the copper mines. Forming little oases of civilisation far from the railheads, they often lost gold-producing time. This drum would crack. That pulley would slip. Days later spares would rattle along from Johannesburg. If a letter were dropped into the Johannesburg General

Post Office in the afternoon, it would not reach Cape Town for two days. There were diamonds to be carried weekly for the Government from the wealthy deposits in Namaqualand. Tenders were being invited for the contract.

Union Airways, pioneers of commercial flying in South Africa at that time subsidised by the Government, were struggling to expand their service. Kidston caught up these ideas in the net of his imagination. He would send aeroplanes to the lonely copper mines in Northern Rhodesia. He would ensure that a letter posted in Johannesburg at night, would reach Cape Town the next day. He would tender for the contract to carry Africa's most valuable freight. He would come to the aid of Union Airways and establish such a network of air-lines in the sub-continent as no one had ever dreamed.

Maps were brought out, time tables consulted, and Kidston set to work to turn the dreams, of which he had told me, into reality. The time was ripe. He discussed his plans with Captain T. A. Gladstone, like Kidston, an air-pioneer. Seven years before, Gladstone had planned out the first leg of the Cairo to Cape air-route, and scheduled the experimental service between Cairo and Kisumu. So well did Gladstone's plans promise that Sir Alan Cobham and Imperial Airways became interested in the scheme. Imperial Airways bought out the Company for which Gladstone had done such fine work. In 1929, Gladstone took part in the planning of the All-Red flying route from Cairo to Cape Town. Starting off from the Cape with Captain F. Timins and Colonel Wolley Dodd, he journeyed up through Africa and helped to frame schedules for the service. Of him it was said, "It was absolutely due to his pioneer work in conjunction with the Cobham route, that has made possible the present Imperial Airways route."

Gladstone was the very man to see visions with Kidston. He had the experience, which Kidston

lacked, of how to run an air service. The two planned gigantically for South Africa—Kidston with his influence and financial backing, Gladstone with his knowledge of the variable continent of Africa.

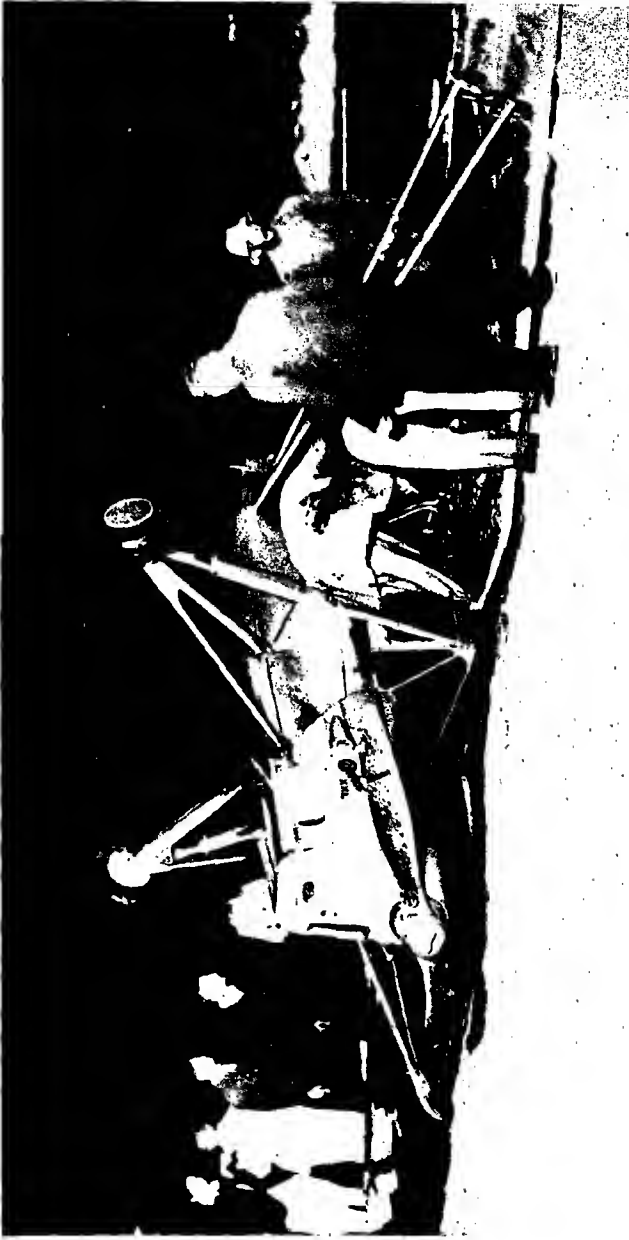
While away up in the Arctic, planes searched the cold-riven spaces for the tiny igloo of Augustine Courtauld, millionaire's son and explorer, Kidston travelled back over the heat-scarred face of the Karoo and on to the Rand, once more smashing records for the distance. In Johannesburg he, Gladstone and a staff of experts worked night and day, planning a schedule. The name of Kidston was an "Open Sesame." Interviews were granted like clockwork. The Government was impressed. South Africa's air future seemed to be definitely assured. . . . And all the while round the sharp edges of the Tandjiesberg the dust-devils swirled and roared. . . .

The last figures were added up, papers folded, and Kidston and Gladstone were ready to fly round the Union. Their route was to include Maritzburg, East London, Durban, Port Elizabeth, and Cape Town. More interviews were necessary. Chambers of Commerce were to be addressed. The tide was at the flood.

v

On the morning of May 5, Kidston and Gladstone took off from Baragwanath in a Puss Moth loaned by Mr. Glen Bateman. The Lockheed-Vega was too big to use on most South African aerodromes. At Maritzburg, the Mayor and Councillors planned a fitting welcome.

That afternoon, I sat in the café where the saxophone still snarled on as it did when Tommy Rose was there. Idly, I opened the first edition of the afternoon paper. I turned to the back pages. My eye fell on the Stop Press Column, usually virginally white in the early editions. There was a little oblong



HOW MOLLISON ARRIVED AT TABLE BAY

LAURENCE MOLLISON ARRIVED AT TABLE BAY



A. J. MOLLISON AT "JOURNEY'S END"

of type. "Glen Kidston Reported Killed . . . aeroplane crashed . . . visiting-cards found nearby . . . Lieutenant-Commander G. P. Glen Kidston, R.N. . . ."

Outside in the streets, black type cried from the posters, "Kidston Reported Killed." Away in Maritzburg, the Mayor and Councillors waited in vain, and then hearing the news, turned slowly home. Gradually the story of the disaster was pieced together. Kidston had crashed in the air-maelstrom of South Africa, the Tandjiesberg. Rugged mountains. Great shoulders of rock that were the haunts of baboon colonies. Air that seethed like a whirlpool. Vast empty pockets. A cauldron of swirling air currents where the Free State highveld fell in a steep escarpment to the valleys of the Drakensberg Mountains. Of this death trap, Mr. J. Williamson, of Kalk Bay (Cape), one of the most experienced African pilots, said the following day: "It is the worst spot in South Africa. I flew over there in a Puss Moth, exactly similar to the machine in which Kidston crashed, with Caspareuthus a few months ago. I have never known a machine to receive such buffeting. I flew my own machine over the Pass two and a half years ago. The air was as rough and dangerous then."

At this same spot, tragedy almost befell Sir Pierre Van Ryneveld and General Brink. Flying over the Tandjiesberg, their plane struck an air pocket and without warning, dropped for several feet. General Brink was not strapped in and grabbed at the sides of the plane to save himself. If this was the experience of a large De Havilland, what might not happen to a smaller plane?

On that fateful morning of May 5, 1931, the dust-devils had whirled and danced, and raged more menacingly than ever. The thorn trees of the veld were bent low by the tearing wind. Corrugated iron sheds were blown to the ground. Under the shadow

of the mountains, beneath two huge buttresses, a native reaper worked in the fields. Above the noise of the wind, he heard the high beat of an engine. He looked into the sand-reddened sky and saw a tiny aeroplane. It came straight through the saddle between the two buttresses, on further, then shot upwards, backwards. Something, a wing, broke off. The plane fell, somersaulting. From it came loud reports. There was a crash, a whirlwind of dust, and then a battered object rebounded, and slid down the mountain slope, coming to rest a tangled mass of wreckage and splintered wood.

The cries of the native were heard in a nearby farm school, where a governess named Miss Wilkes was teaching three small girls. Out they rushed and then to the hill-side, clambering, scampering on the rocky terrace. Before them lay a mangled Puss Moth and two bodies, gored and terribly mutilated. The engine had ploughed its way through one body and struck the second with sickening force. The only part of the first body that was whole, was the back of the head. The colour of the hair was light. Papers and luggage and five-pound notes were scattered round. A typewriter was an unrecognisable jumble of metal; a gold cigarette case, bent and twisted. A visiting card bearing Kidston's name, that "Open Sesame," fluttered and danced in the wind-edges. Sixty yards from the wreckage was a tattered wing. The dial of a watch with the hands pointing to 11.10, was found stripped from the mechanism. A portrait of Kidston's four-year-old son, Archie, was practically the only thing unbroken.

Horrified, the governess and her charges ran back down the hill. The news spread quickly. It reached the storekeepers at Mambe; then the Magistrate at Harrismith; and so on in ever-increasing circles, right to the outer world that shuddered at the tale the cables had to tell. When the Magistrate arrived at the scene, he examined the bodies. They were,

without doubt, those of Kidston and Gladstone. Their shirt collars showed that, and on Kidston's hand was a signet ring, bearing the imprint of a unicorn. His wife had given it to him when Archie was born four years before.

That night Mrs. Kidston was motoring in the West End of London. The posters of the evening papers screamed, "Famous Millionaire Flyer Crashes." She passed on. The tragic poster conveyed nothing to her. Later she was told that the "Famous Millionaire Flyer" was her husband. Like the rest of the world, she could not credit it. It simply could not be. A cable came from Cape Town and confirmed the worst. The world again re-echoed with tributes to Kidston and Gladstone—dead. This time it was not a pæan of praise, but a mournful dirge, the leader writers sang.

The *Daily Herald*: "Kidston was an amazing man, courting danger as a mistress. A gallant life has found a fitting end."

The *Daily Telegraph*: "One of those intrepid spirits who remind us that the age of great adventurers is not over."

The *Daily Express*: "Such men leave behind them such a clear summons to the youth of all lands and such a trail of inspiration, that they defeat death."

Sir Pierre Van Ryneveld, the oldest pioneer of them all: "The death of Lieutenant-Commander Kidston is an absolute tragedy, and not only a human one, but also a tragedy for aviation. I have known him for six years, and his death is a colossal loss, as he was so obviously keen on encouraging aviation. He was the type of man who could ill be spared."

Colonel, the Master of Semphill, President of the Royal Aeronautical Society: "It is terrible news. Glen Kidston had wired me saying that if there was to be a reception in his honour, he would like it to

be held at Hanworth Aerodrome. His death is a very great blow. I feel certain that Kidston would have died happy in the knowledge that he had proved beyond a shadow of doubt that mails must be segregated from passengers."

And Mrs. Kidston, paying tribute to a husband who recked so little of his life: "It seems like some terrible dream. Time and again he escaped death, and to think that he should meet his end like this, is all too terrible. I can pay no higher tribute to him than to say he was a very brave man." Later she spoke further of her husband: "He spent freely always, but seldom on himself. Most of his money went to experiments from which he could never expect any material return."

Just then, at the docks at Portsmouth, lay one of Kidston's £3,000 experiments. It was a curious craft, forty feet long, with a ten-foot beam and a two-foot draught. Completely equipped as a yacht, it incorporated Kidston's own ideas of a tender to a larger ship. Its name was typical of the man—*Advance*. The future of this craft followed the rest of Kidston's plans—into the air.

Said the *Cape Times*: "Commander Kidston is dead; his partner is dead; and the fate of Union Airways hangs in the balance. But South Africa may yet profit by the example they set. It would, indeed, be the finest monument to their memory if the work they began was completed by others. The opportunity is there. Will somebody take it?"

Then the *Cape Argus*: "A variety of circumstances has contrived to hamper and depress flying in this country. The spectacular advent of Kidston, and his partner's work behind the scenes, promised a quick solution of all our difficulties, and a flood of new energy. Death has closed this easy way out. . . . But the work must go on. Africa will take its toll of the pioneers of community flying, as it has done of all the other pioneers. The memory of Kidston and

Gladstone will stimulate others to overcome the difficulties which have cost them their lives."

All South Africa watched the progress of the bodies from Harrismith to Johannesburg. Across in England, at St. Mark's Church, North Audley Street, London, a simple memorial service, after Kidston's own heart, was held. "Fight the Good Fight," his favourite hymn, was sung. The singing of "Rule Britannia" was left over till his funeral service.

In Johannesburg, the bodies were laid in All Soul's Chapel. There too in the vaulted chapel clear voices rang out, "Fight the Good Fight with all thy might." . . . Kidston, who had left Cape Town with a high heart and a world to conquer, arrived back in his coffin. In another three days he was to have opened negotiations with the Government and submitted all his plans.

The Lockhead-Vega that had borne him in triumph from Netheravon, stood neglected, ownerless, in a Johannesburg hangar. Experts puzzled over the ruins of the Puss Moth, their task rendered more difficult by hundreds of morbid souvenir-hunters, who had filched away pieces of the fabric. . . .

The following Friday, a woman sprang wildly to the side of the *Balmoral Castle* in the Cape Town harbour. The passengers saw her mount the rails and leap overboard. A labourer dived into the sea after her. "Leave me, I want to drown," she sobbed, as the rescuer caught hold of her, and pulled her to the side of the ship. "I have nothing more to live for." She went on to tell of her husband's death. An air of gloom and tragedy hung about the *Balmoral Castle*, as she made for England with the coffins of Kidston and Gladstone stowed away in her holds. Dock-hand and official at Southampton stood cap in hand on June 1, when Kidston and Gladstone returned to their motherland.

Gladstone was buried in his home-town, Darlington, Kidston at St. Peter's Church, Glasbury-on-

Wye, Radnorshire. "Rule Britannia" was sung at his funeral service. The date was June 2. On that date, he had intended being back in England again, after a record two days' flight from Nairobi. The age-old seaways took Kidston back to his grave.

On the day on which the death of Glen Kidston was announced in London, a friend of his received the following brief note from him dated April 17, Cape Town :

"DEAR —, .

"You canny Scot! Come back by boat indeed! Many thanks all the same!

Yours,

GLEN KIDSTON."

KIDSTON INQUIRY—VERDICT AND
CRITICISM

A BOARD of Inquiry consisting of Mr. C. E. Stidolph, Magistrate of Harrismith, Captain P. L. Lindrup, secretary of the Civil Air Board, and Captain C. J. Venter of the South African Air Force, was appointed to investigate the cause of the Tandjiesberg disaster.

Remarkable allegations of an "inherent weakness" in the Puss Moth were made during the inquiry by Air Artificer O. Ottley, Inspector of Accidents and technical expert to the S.A.A.F. These allegations were denied subsequently by the manufacturers, the De Havilland Company, who stated *inter alia*, "There is absolutely no room for doubt that the original unmodified Puss Moth is correctly designed to the requirements for the normal certificate of air-worthiness at 2,050 pounds."

On July 29, 1931, the Board issued the following findings:

"The Board having considered the evidence laid before it finds (1) that Lieutenant-Commander Glen Kidston, who was a duly licensed pilot and had previously owned and flown a Puss Moth aircraft, was the pilot of aircraft ZSACC, which left Baragwanath with Captain Gladstone as passenger about 10.20 a.m. and crashed at Tandjiesberg, Harrismith district, at about 11.25 a.m. on May 5, 1931, having flown a distance of approximately 175 miles.

(2) That the machine was thoroughly inspected by a competent ground engineer of the De Havilland

Aircraft Company, Johannesburg, prior to departure and certified as airworthy.

(3) That the aircraft was heavily loaded but not in excess of the maximum authorised weight laid down in the British Air Ministry certificate of airworthiness.

(4) That the luggage was bulky and, according to the evidence, was not secured. That there was a typewriter and case weighing 11 pound unfastened in the luggage rack, together with a camera in a case.

(5) That although there is evidence that Commander Kidston reached Tandjiesberg, a distance of approximately 175 miles, in about one hour, five minutes, there is no evidence which justifies the Board in coming to a definite conclusion as to the speed at which he was travelling on reaching Tandjiesberg.

(6) Owing to the peculiar nature of the formation of this part of the country high velocity winds set up extraordinary atmospheric conditions and that when the accident occurred such conditions prevailed.

(7) That taking into consideration the adverse weather conditions, the pilot was flying at a dangerously low altitude.

(8) That the right wing broke in the air and became completely detached from the aircraft.

(9) That the Board is satisfied that the slight accident to this machine at Bulawayo did not damage the wing.

(10) That from the technical evidence submitted by the De Havilland Company, England, and confirmed by the British Air Ministry, it is clear that no error was made, as was suggested, in the stress calculations in this particular type of aircraft in its unmodified form, and that the design strength was that required for the normal category certificate issued by the British Air Ministry for a total authorised weight of 2,050 pounds.

(11) That while the modifications which have since

been incorporated and which are still being incorporated enhance the safety factor of the machine, there was nevertheless sufficient safety percentage in the machine flown by Commander Kidston as laid down by the British Air Ministry.

(12) That the atmospheric conditions were such that there is a possibility of the typewriter having become dislodged from the rack and momentarily incapacitating the pilot who, on his recovery, may have involuntarily handled the aircraft in such a manner as to impose an undue strain on the wing structure by suddenly altering the incidence at high speed.

(13) That if the latter possibility be discarded the Board then comes to the conclusion that the accident was the outcome of the following combination of circumstances, viz :

- (1) Very severe weather conditions.
- (2) Heavily laden aircraft.
- (3) The broken nature of the country which created violent atmospheric conditions and which were unexpectedly encountered by the pilot.
- (4) The low altitude at which the aircraft was flown.

The Board makes the following recommendations :

(1) That the suitability of blood cemented plywood in the construction of aircraft to be used in South Africa be thoroughly investigated.

(2) That the Civil Air Board issue a notice to all pilots prohibiting the conveyance in aircraft of unsecured articles.

(3) That a suitable warning be issued by the Civil Air Board to all airmen flying in South Africa with reference to atmospheric conditions over mountainous country.

(4) That the rear spar and tank bay modifications referred to by the De Havilland Co.,

England, in their correspondence with the managing director of the De Havilland Aircraft Co. of South Africa (Pty), Ltd., Johannesburg, be incorporated in all Puss Moth aircraft registered in South Africa, and that until such time as these modifications have been effected the total authorised maximum weight of such aircraft be reduced to 1,900 pound.

(5) That the Board desires to emphasise that the provision of suitable air maps and meteorological facilities are matters which call for further consideration in the interests of the safe development of aviation in South Africa."

The findings of the Board of Inquiry were criticised in the August issue of *Aviation*; and on September 10, 1931, the *Cape Times* published the following letter from Flight Lieutenant O. Cathcart-Jones, who wrote from the London-home of Glen Kidston :

" I have been reading the report, emanating from Pretoria and published in the *Morning Post*, of the Board of Inquiry investigating the cause of the aeroplane accident in which the late Lieutenant-Commander Kidston and Captain Gladstone lost their lives.

" I consider that in fairness to Commander Kidston, it is time that some statement was made repudiating the farcical and impossible reasons that are put forward as being responsible for the crash.

" As personal pilot to the late Commander, I am in a position to state with authority that his ability as a pilot was considerably above that of the average commercial or service pilot, in so much as his resource and initiative, combined with his great powers of perception and judgment, made him particularly capable of handling an aircraft well enough to deal with any emergency likely to arise in the air.

“ Soon after my return from South Africa, I had an interview with the chief designer of the De Havilland Aircraft Company in order to solicit his personal opinion as to the probable cause of the accident, and we discussed the whole matter at some length.

“ He then expressed the opinion that the crash was not due to one single cause, but was due to the combination of the following three factors, which occurred together in this isolated case :

(1) That the aircraft was heavily laden (not overloaded).

(2) That it encountered extreme meteorological conditions which imposed great stresses on the construction, under which stresses——

(3) The wing of the aircraft became detached. (This aircraft had previously had an accident in flying through some telegraph wires and was, in addition, unmodified).

“ Therefore, taking into consideration the very sound theory as to the cause of the crash outlined above, and, incidentally accepted by the majority of the aviation world, the statement made by the Board of Inquiry at Pretoria in which they attribute the accident to the fact that a typewriter became dislodged from the rack and temporarily incapacitated the pilot while flying at high speed, is both farcical and impossible.

“ If any thought was given to the matter, it would be realised that the typewriter would have to pass Captain Gladstone, who was sitting behind Commander Kidston, before it could possibly reach Commander Kidston, and the position in which it was placed in the machine, would make this impossible.

“ Reference is also made in this report to the fact that the airmen were flying at a low altitude in bad weather.

“ This statement is directly in opposition to the

testimony of the eye-witnesses, who declare that the machine crashed from a height of some 6,000 or 7,000 feet, and the wing was seen to fall off before the machine reached the ground. This testimony is entirely inconsistent with any report of low flying.

“ It is therefore contended that the combination of causes contributing to the accident is of a nature which entirely removes any possible reflection on the pilot's skill, and that no personal error in judgment was responsible for the very regrettable accident.”

XIII

ALL EYES ELSEWHERE—THEN

AERIAL record breakers turned their eyes to other parts of the world after the Kidston-Gladstone disaster in Africa. Within a few months amazing feats of endurance were accomplished; oceans and whole continents spanned in non-stop flights; incredible speeds attained. The glamour of Africa's Skyways began to fade rapidly.

Towards the end of June, 1931, Wiley Post and Harold Gatty tore across the Atlantic in the *Winnie Mae*, a single motored monoplane, on a 15,000-mile flight round the world. They battled with rain and fog at 12,000 feet above a storm-tossed ocean, dragged their mired plane with the aid of horses from a water-logged field at unpronounceable Blagov-yeshchensk, in the Arctic regions; made a nightmare flight of 2,500 miles from Khabarovsk in Asia, to Solomon, Alaska, over the Arctic Ocean. The slightest engine trouble might have meant death. . . .

About the same time C. W. A. Scott broke Kingsford-Smith's record from England to Australia by 48 hours, completing the flight in nine days, 3 hours 40 minutes. Even this thrilling race across continents was eclipsed by Mr. J. A. Mollison in August, when he clipped two days, 1 hour 35 minutes off Scott's time.

The world's newspapers and their vast publics now feasted on records. The accomplishment of Post and Gatty spurred on Boardman and Polando to set up a new non-stop distance record. In July

1931, they flew from New York to Constantinople across the Atlantic in 46 hours, and were stated to have broken the previous record of 4,912 miles from Paris to Manchuria held by Captain Costes and M. Bellonte in September 1929.

Still aeroplanes streaked after records through skies of the five continents. No matter what the record, there were airmen confident they could do better. Pangborn and Herndon flew 4,465 miles across the Pacific from Sabushiro Beach, in Japan, to Wenatchee (Washington) in 41 hours 13 minutes and won the £5000 offered by a Japanese newspaper.

Squadron Leader Gayford, D.F.C., and Flight Lieutenant Bett made a non-stop flight from London to Egypt for the first time; and then Flight Lieutenant Stainforth on September 29, 1931, attained the formerly unheard-of average speed of 408.8 miles an hour in a Vickers Supermarine racing seaplane fitted with a special "Sprint" Rolls-Royce engine. He took off from Southampton Water and passed over a course between Lee-on-Solent and Calshot, the echoes of his mighty engine resounding like the deep tones of some giant organ.

Mr. R. J. Mitchell, designer of the machine, afterwards declared that 1,000 miles an hour in the air was practicable if present development continued, and a contracting wing were made feasible.

The hectic months filled us with wonder. A record to-day, broken to-morrow, another essay. . . . Africa was forgotten in the thrill of conquering other skyways, and Kidston's record still stood just as the scar of his crash still showed up on the Mountain-of-the-Little-Teeth in Natal.

Mollison, it is true, was planning a record dash to the Cape in the aeroplane he had flown from Australia to England; but the date of his effort was uncertain.

So it was left to Peggy Salaman to blaze another startling air trail down Africa and bring the Continent once more into the news.

XIV

. MISS PEGGY SALAMAN. MR. MOLLISON

Non-Smoking Debutante—Elements of Romance—Flying Lessons—Some Birthday Present!—Famous Airmen Unimpressed—At Cape Town With Fourpence—Scoop—Petrol-Can Pillow—Peggy Tells Her Story—Elusive Camels—Strain—Oh, for Liqueurs and Asparagus—Lost and no Petrol—Bad Shooting—Lions in Cabin—Whoopee—Gordon Store Talks—Jimmy Mollison Follows—All Records Go—Requiem—"Happy Landings."

PEGGY SALAMAN—nineteen years old, blonde, a pretty debutante, who neither smokes nor drinks cocktails, an abiding believer in the teachings of Christian Science—dropped out of the skies above the Cape of Good Hope on Guy Fawkes Day in 1931. She had shattered the Kidston record by one day, 1 hour and 23 minutes.

The tale of her exploit—until now not fully told—contained all the elements of romance: A pale, frail girl had won fame overnight; her plane, a birthday present from a doting mother; a single evening frock packed among her baggage, to be worn after her triumphant arrival; a forced landing in the bush; shooting away saplings to clear a runway; chewing gum to stop leaks in the tanks; lion cubs bought in the Nubian desert—one of them as a present for baby Princess Elizabeth.

Yes, this was the human story the world is always demanding. Yet to me the most amazing side to the story is how Peggy dropped from the skies, a shy, inexperienced girl with no knowledge of the world, of what she had done, or of what she was going to

do. . . . She was wondering whether her mother would come out to the Cape by the mail steamer to take her home . . . and perhaps put her to bed.

Peggy in her home near Hyde Park lived a sheltered, unruffled life, stirred by no supremely budding ambition. She met young men and women whose hearts were in greasy machines and the stuttering roar of aero engines—youth, usually not over-rich, dying for a chance to fling off across continents on an aerial Odyssey in search of fame.

Perhaps that was why Peggy was fired with the idea of breaking the record to the Cape ; she must have heard all around her the vain longings of the youth that lives by Hanworth. Even to-day she does not know, as she confessed to me, the real reason for her down-Africa dash. She "just wanted to beat Kidston"—the man who had undertaken the adventure "to ginger up the Post Office."

II

And so she planned. She learnt to fly, quickly ; and then her mother, on September 20, gave her the world's most thrilling birthday present—a Puss Moth plane, all agleam with the promise of rare adventure. It was painted navy blue, picked out in royal blue, just as had been her babyhood pram ; and in truth the machine, with a cruising speed of 127 miles an hour, was a mere pram compared with Kidston's roaring monoplane.

So Peggy flew her own plane, planning all the time. Baggot Grey helped her with charts and directions, complete to the minutest detail. She was fit from the winter sport of St. Moritz, and she did not think of training for the flight. All she had to do, really, was to find a second pilot and navigator to go with her ; inexperienced as she was, she could not fly alone and unprotected over unknown territory that is still among the wildest in the world. Her

mother asked three famous airmen to go, and offered them handsome fees. But all refused; for they declared that no Puss Moth could reach the Cape in less than a week. Eventually the job was accepted by Gordon Store, a twenty-five-year-old South African boy who was in London acting as assistant instructor to a flying club. He had been born in Kimberley, the diamond city, where his family owned a big drapery concern. And Gordon was keen to see Kimberley again. So he became second pilot of Peggy's *Good Hope*, and the hero of a flight remarkable even in a year of heroic performances in the air.

The *Good Hope* left Lympne at eleven o'clock on the night of October 30. In the dawn of November 5 she winged across the tail end of Africa. At twenty-three minutes to eight o'clock on that Cape summer morning she swooped down, triumphantly baptising the new Windermere airport, built for the coming air mails from England, that had hastily been certified to permit the landing of her plane.

Few people were there to see her victory over time and space: she had spent nine of the night hours at Kimberley, to leave again at 3 a.m., and Cape Town had not expected her for several hours.

The plane plumped down; a door opened; and out stepped a slight figure in a soiled suit of grey flannel, silver-buttoned; a tremulous hand swept a tangled mop of curls away from a pair of clear grey eyes; a pale-lipped mouth in a pale face smiled quiveringly.

III

"Oh! for a cup of tea!" said Peggy Salaman.

The crowd rushed forward; the Press photographers skipped around and flashed their cameras at her from all angles. . . .

"How do you feel?" someone asked.

"Oh, terribly happy and thrilled. I've been

looking forward to this for such a long time. I can hardly realise I'm in Cape Town at last. I hardly know what to say. It's been all so thrilling. I don't quite know whether I'm on my head or heels.

"One thing I do want to make certain, please let me be known as Peggy—Miss Salaman sounds so terribly stiff and formal, and I'm not that at all."

And then she was led away to a motor-car; Gordon Store, a modest hero almost unnoticed, saw to the safe stowing of *Good Hope* in the hangars.

Nobody knew that Peggy had no friends in Cape Town; no arrangements; no plans; no clothes; or what hotel she could stay in. She had dropped out of the skies and taken South Africa unawares. Even half the newspapers had missed her.

It was a Press car that took her to the city and to the Queen's Hotel at Sea Point. A rather embarrassed reporter handed her out of the car and into the reception hall. A motherly-looking woman stepped forward.

"My poor dear," she said, and she put her arms round the girl in the stained flannel suit. "Can I do anything to help you?"

The newspaper reporter, grateful that a woman had come forward to relieve him of the girl, slipped away to telephone his office—waiting with sub-editors, linotype operators, all gasping for his "copy."

The motherly-looking woman led Peggy to a bathroom and gave her the rose bath salts her soul craved. Then she locked the bathroom door on the outside—and ran downstairs to another telephone. She was another reporter!

Holidaymaking from Johannesburg, chance had brought her to the hall of the hotel as Peggy arrived—and so she got her greatest "scoop."

She telephoned to Cape Town's "Fleet Street." One minute later a girl-reporter and myself were in a car rushing to Sea Point. Until that moment

nobody had known where Peggy had vanished to when that other Press car had spirited her away from the aerodrome.

I found Peggy in bed, behind locked doors, with the motherly woman in attendance—no longer a reporter, but a woman doing all she could to comfort and rest an overwrought girl.

But Peggy would not rest. Playing with her Webley .32 revolver and poring over the charts that showed her aerial dash, she insisted on talking.

She had demanded, and got "the biggest, deepest bath, with oceans of soap and some rose bath salts—you can find them. And then a bed, with piles of pillows."

"The last time I put my head on a pillow it was a petrol can and I've a feeling for something softer this time," she said laughingly.

She refused the bromide we almost forced on her; instead she demanded an opportunity of telling her story for the London newspaper to which she had promised it. And this was the story, as she told it me; jerkily, spontaneously as her tired brain juggled with its dramatic memories:

"I've done it. I've broken the record. I can't realise it all yet. I'm terribly tired. I have only had 20 hours' real sleep in 5½ days, and all the time I've been in the air, piloting or not, I have suffered terrible strain. But it's all over now, and I can sleep. First I must tell you about my flight, because I am so grateful for the way people have jumped up to welcome and be kind to me.

"Before I took up flying I really did very little. I had been to twelve different boarding-schools, but I hated them. My other hobby, if I had one, was tapestry work. I covered antique chairs by Chippendale, Sheraton and Hepplethwaite, and enjoyed doing it, though I hate sewing.

"Learning flying, I spent 10¾ hours solo in my

plane, and I did 40 hours dual and solo in another.

"I left London at eleven o'clock last Friday night—and here I am. I could not have done the flight by myself, and Gordon Store was wonderful. He was my navigator, and we went fifty-fifty at piloting. Out of 64 hours in the air we have each done 32 on the 'stick.'

"My original ideas of Africa were not pleasant ones. I am afraid I got most of them from the film 'Trader Horn' which was shown in London, and it was full of wild beasts and other unpleasant things. I was not at all anxious to see them, but I was keen to see a camel in Egypt, and didn't.

"On the first day of my flight I got well on towards Egypt—to Athens in fact, which is a distance of 1,563 miles. That first hop was one long stretch of excitement. Nothing adventurous happened—though we had a bit of difficulty in finding the River Marne in France at night, but for me it was tremendously thrilling, because I was off on my first big adventure.

"The only sightseeing I have done on the trip was in Rome, when I snatched a moment to look at St. Peter's, Athens, too, brought the Acropolis and all the ruins that stood so beautifully about the city as we made for the naval aerodrome at Tatoi.

"We spent only a few hours at Athens—from 9.20 in the evening to one o'clock in the morning, when we set off across the Mediterranean to Cairo.

"We only had 20 minutes in Cairo and then we set off into the real Africa, over the pyramids and the sand. I stared and stared for camels, but I didn't see one, and I can't tell you how disappointed I was. Still, I was happy that day, for the flight was going well and we covered 1,352 miles. We got to Wadi Halfa at sundown, and at sun-up were off again.

“ We struck the real Sudan after that. We had to do 1,275 miles that third day and we had to fly over the Sudan and the terrible swamp countries.

“ I was beginning to feel the strain of it all, for I had had practically no sleep, and I don't suppose the food I ate would have satisfied a hungry man at one meal.

“ The excitement kept me from feeling hungry, really, and I only had tea and sandwiches when we came down. In the air I lived on drops of water out of a bottle and tablets of compressed malted milk. They were wonderful.

“ I have never eaten big meals, and the lack of food didn't worry me, but I shall never forget the sudden longing that would come on me for something appetising—funny things, like a dish of asparagus and coffee with cream and liqueur chocolates.

“ The only game I saw was giraffes in the bush on this stretch, but even they could not keep me awake. I dozed off while Gordon was doing his turn at the joystick.

“ When I woke up I got a terrible shock. We had been following native paths, not using a compass course, but swinging about to follow the paths, which were difficult to distinguish.

“ I woke to find Gordon circling round, looking for the path we were following. We were lost.

“ It was a terrible experience—the most terrible I've ever had in my life. We had practically no petrol. I saw—only 17 gallons. Every minute our store was growing less. Down below was the wild country, and it seemed that we were going to be lost in the bush.

“ I dread being lost. I would far rather be drowned than lost, and up there I wished the plane had rather come down in the Mediterranean than here.

“ The petrol dropped to 11 gallons. It seemed

certain that we were going to meet disaster in a forced landing.

"But suddenly everything was all right. We found the path, and found we were just at Juba. We got down with only a few drops left—as the oil people told us after their examination—in the port tank.

"I've got a slip of paper in my pocket now that describes the experience. I wrote this up in the air: 'Height, 2,000, air speed 90, to make the petrol last out. Saw a herd of giraffes. Plenty of native villages here, built of straw, in circles, with cattle in the centre.' Have eaten all my share of lunch and drunk all my water. Sun was so hot it made me sleep.'

"We wanted to spend the night on Juba aerodrome, so as to get off early next morning, but we were advised not to. Two nights before leopards had visited the aerodrome and carried off some animals.

"We got off pretty early on Tuesday, though, and reached Entebbe to refuel at 8.45 a.m. We spent only 20 minutes there. I loved this part of Africa, for it was beautiful flying over the lake, all blue in the early morning.

"I piloted the plane non-stop to Abercorn that day, and we had another adventure a little later.

"Darkness was coming on and we had to land short of Mpika, where we had intended to come down.

"Gordon brought the plane down in a little clearing in the bush. He came down well, and it was some test of our nerves, I can tell you.

"We were safe—I felt that as we landed. All the damage we suffered was a tear in the fabric of the tail plane, caused by a tree stump.

"Gordon and I got out right away and explored the little clearing. We decided to have some revolver practice. I had never used my pistol

before—a Webley .32 that I had bought just before leaving London. I had never shot with anything but a bow and arrow before.

“ I tried the revolver, shooting thin tree stems that were in the way of a take-off for the plane next morning, but my aim was so bad that Gordon told me to stop wasting ammunition.

“ We went back to the plane, and Gordon started poring over his maps. He spent until one o’clock doing that.

“ We had to stay ten hours in that clearing altogether, and I felt terribly lonely. Darkness came on soon, and the stars came out, and I watched the stars. I was so tired my head was almost dropping off. We shared all the food we had—two bottles of stale water, nine tablets of malted milk, and a lemon. I had the lemon.

“ With Gordon poring over the maps, I went out of the cabin and walked around with the two little lion cubs—18 days old now—which I had bought in Juba.

“ One of them, you probably know, I have called Juba, and the other one, which is a female, Joker.

“ I am going to take them both back to England with me, and I should like to offer one to little Princess Elizabeth.

“ I took the revolver with me, and the cubs slept on my lap while I sat next to the damaged tail-plane. But Gordon said there were leopards about in the bush and urged me to come back into the cabin. The cubs wouldn’t stay in their basket, and had to sleep on my lap. I fell fast asleep, very uncomfortably, with my head on the reserve petrol tank, and did not wake until after one o’clock in the morning. It was freezing cold.

“ Next morning we took out our pistols again and explored the clearing and the bush. I walked in grass that came up to my thighs. We shot more

tree stems down, and filled in holes in the ground that were made by elephants' feet.

"Then we took off again—and there was no more excitement.

"We got to Bulawayo at lunch time yesterday, spent an hour there and went on to Kimberley. I piloted this stretch myself.

"Poor Joker did not stand the flying well—she was sick all the time—and Juba wouldn't stay in his basket but roamed all over the plane. I had to leave them with the Mayor of Kimberley. They will come down by to-morrow's train.

"And this morning we reached the Cape Town aerodrome. Gordon piloted the plane round up above the aerodrome, and then I brought it down. I wasn't particularly pleased with my landing—I've done better.

"I hardly knew what to say to the Mayor when he welcomed me.

"Then I was taken away to Sea Point to the Queen's Hotel. A woman met me on the veranda as I got out of the car and said, 'Can I do anything for you?'

"'Give me a bath,' I said, and she took me away, put me to bed, and locked my door against everybody.

"I have never met a stranger before who could be so kind at a moment's notice.

"I am spending the whole morning in bed, and what a joy it is. My evening frock is all crushed into shreds, and I'm having it pressed out. I've got hardly any clothes with me—no stockings and no evening shoes. In fact, I have no clothes at all. I'm going to dance at the Queen's Hotel to-morrow night if I'm fit.

"Meanwhile, I'm terribly tired and I want to sleep. Photographers have been here all morning and I'm really beginning to wonder what it is all about and why there's so much fuss.

"The only thing that is spoiling my joy at winning through so luckily is the criticism made by Mr. Grey, the editor of *The Aeroplane*, in London. Really, I feel I have pulled my weight on this trip. I've done fifty-fifty with Gordon Store in piloting the plane. It is my idea, and really I have had to work hard. My navigator will say that, too.

"I have made no plans. I have not yet decided when I'm going back to England. I must wait for news from mother first. But when I do go back I am going to Marseilles, and I am going to fly my plane solo from Marseilles to London. That was Mr. Grey's own suggestion.

"I also intend taking my plane up in Cape Town and doing a little flying, just to show that I can do it. I don't know yet if I'll try any more stunts—I haven't had time to realise that I've done this one yet.

"Now I'm awfully tired and this has taken me a long time to tell. I want to sleep a little bit because I must get out this afternoon to do some shopping." . . .

Someone brought her two bouquets of flowers. She was thrilled with the thought. Cables began to pour in on her crowded bed.

"Darling Hugh," she exclaimed, as she read through one cable. "He's my brother in Australia. I haven't written to him for three years," she said, "but I always send him papers. He's addressed it to 'Miss Peggy Salaman, flying from England to Cape Town,' and it's actually reached me. He says, 'Proud of my plucky little sister.' And here's another from one of my boy friends—aren't they pets to remember me?"

"I just wish my mother was here now," said Peggy. "She's the one who deserves the praise, for she did everything to encourage me and set me

off on the trip. I've spent a lot of money and I've only fourpence left, so the family will have to bail me out of Africa!" . . .

She had very little money : she was just a tired little girl in a strange world ; she did not know what she was going to do, and expected her mother to come out and look after her.

But others stepped forward to act as mothers to her. The Mayoress of Cape Town, Mrs. H. J. C. Stephan, took Peggy under her wing and put her to bed after she had brought the shoes and silk stockings she had to have.

And Cape Town after that saw her making the " whoopee " she had promised herself in London a week before. I saw her in all places ; dancing at a ball with the young men of Cape Town ; making a brief broadcast speech, saying a few pathetically shy words at a flying club luncheon.

v

I saw her, still a shy, nervous girl, bowing in the limelight in a theatre box while on the stage below, Mr. Herschel Henlere, the pianist, sang a little song he had composed in her honour :

" Peggy, sweet Peggy,
You've won renown
For one so young
To reach Cape Town." . . .

The song was slight, perhaps ; but it was far truer than the composer could ever have known.

Meanwhile Gordon Store, still unshaven and haggard after his days of strain, hid from the limelight. I had seen him while he rested for an hour in bed, and he had replied to the criticisms of Peggy aired in the London Press.

" I must give Peggy full credit for her pluck and ability," he said. " She took control of the machine



(LEFT) M. ANDRE SAITI AND (RIGHT) CAPTAIN MARCII GOUJJI ON THEIR ARRIVAL AT THE CAPTIVE
FROM THE BOER WAR



CAPTAIN BARNARD

over long stretches and she definitely has done her full share of the flying. Peggy has been a brick. This was her trip. She definitely pulled her weight. My job was chiefly that of navigator."

Then he turned over and went to sleep again. Next day he disappeared on a solitary fishing trip to a lonely part of the Cape coast.

In London, meanwhile, Mrs. Salaman had been awakened with the news of Peggy's triumph. "I knew she would do it," she exclaimed joyously. "Her sister Auriol and I are overproud. I do not think the strain of going without sleep hurt her. She is young and full of enthusiasm, and is never happier than when in the air. She is a born flyer."

The King commanded the Governor-General of South Africa to congratulate Peggy on his behalf. The rest of the world joined in acclaiming her pluck. Cables streamed to the Cape in one avalanche of praise. She arrived back in Southampton by the *Warwick Castle* on November 30. The Moth was packed in two cases. Joker and Juba were sold to the Olympia Circus and exhibited on behalf of a London hospital.

Mollison, waiting at Lympne to start on the London-Cape venture he himself had planned, ruefully declared, "They have certainly set me some task." And he settled down grimly to wait again for perfect weather, undaunted, full of hope.

At 8.35 on the night of Easter Monday, March 28, 1932, Jimmy Mollison, unshaven, utterly exhausted, his bloodshot eyes overstrained and seeing double, pitched down into the waves of Table Bay. He had left Lympne at 1.5 on the morning of Thursday, March 24, slept a bare two hours on his 4 $\frac{3}{4}$ day flight to the Cape, clipped more than 13 hours off the Salaman-Store record, and almost halved the nine-day solo record put up by Lieutenant Caspareuthus.

He flew a Puss Moth, given him by Lord Wakefield, down the West Coast of Africa to shorten the route

by 800 miles. The plane had a range of 2,000 miles and was specially prepared for long distance flying. Its tanks held 120 gallons of petrol.

Twelve hours after leaving Lympne, Jimmy Mollison was at Oran in Algeria. He pushed on for the French desert outpost, Colomb Bechar; dined with the French colonel there; slept two hours at Reggan (under pressure of some adamant Frenchmen); and took off at 2.30 on the Friday morning for Gao across 2,000 miles of the desolate dangerous Sahara. When the instruments began to swim before his eyes, he descended in the desert to rest awhile. Hours later he found himself in the mud flats of the River Niger, 20 miles from Niamey. He hurried on for Duala through heavy rainstorms and a moist heat which was more trying even than the dry scorching heat of the mid-Sahara.

Reaching Duala at daybreak on the Sunday, Mollison refused to yield to the demands of a sleep-drugged body, and made for St. Paul de Loanda. When he arrived there, he had flown 2,000 miles with hardly half an hour's rest. Still he could not afford to tarry. He refuelled at St. Paul de Loanda and started off on another all-night flight. Monday morning dawned. It found him nearing his goal. Walvis Bay, dusty and hot, loomed up at 10.45 a.m.

"I was thankful to see it," said Mollison in Cape Town, "though when I landed I felt tempted to throw up the sponge. I was almost ready to give Africa best. But I had a brandy and soda, and screwed up all my determination to force me into the plane for the last leg of my 6,500-mile flight."

Propping open by sheer will-power the heavy lids of eyes, craving to be closed, he glimpsed the lights of Cape Town's aerodrome shortly after eight o'clock on Monday night. But then came another "blue moment" (as Mollison described it) when he saw double. Instead of dipping down to the brilliantly lighted aerodrome where thousands had come to

greet him, he turned away and landed in the sea close to the shore.

The waiting crowd at the aerodrome heard the last drone of the Puss Moth as it dived down towards the beach and turned up on its nose in the surf. A passing taxi-driver rescued the bewildered Jimmy, and drove him to the airport. (He proudly refused to accept a fare.) Few suspected that the bedraggled figure being supported to the airport superintendent's office was Mollison.

Later in the evening the record breaker ate his first meal since leaving St. Paul de Loanda, and exchanged reminiscences with Amy Johnson who had arrived in Cape Town unexpectedly by the mail boat, twelve hours before. The usual blizzard of cables began. Among the first were those from Peggy Salaman and Mollison's ninety-year-old grandfather in Scotland. The King too conveyed, through the Governor-General, his admiration of the feat.

Praise of Mollison's triumph of nerve and endurance reverberated throughout the world. His was the spirit of the pioneers who have torn the clouds of mystery from Africa's skyways; his the spirit that has invested the wings over Africa that have soared so nobly. May the thunder of his engine, and of others, echo on in a song of triumph in the days that follow.

May their roar be the requiem, brave as the beating of more celestial wings, that mourns the sacrifice of Glen Kidston and Tony Gladstone.

The refrain of the requiem sung by the wings over Africa's skyways must echo onwards and endure.

“ HAPPY LANDINGS ”

CAPTAIN GOULETTE AND M. ANDRE SALEL

The French Europe-Cape Flight Down the West Coast of Africa.

MAY 30, 1932, was a day of tragic coincidence. In the first place it brought news of the death of Captain Marcel Goulette, one of France's premier airmen, whose flight to the Cape from Paris caused almost as great a sensation as Mollison's. Piloting two survivors of the *Georges Phillipar* disaster, Mr. and Mrs. Languvillar, from Brindisi to Marseilles, Captain Goulette crashed on a thickly-wooded mountain near Veroli, Frosinone Province, Italy. They were all killed.

In the second place, on the very day that his death was announced, Captain Goulette was to have flown to the coast of Spain on an aerial "pilgrimage of memory." For May 30, 1932, was the first anniversary of the death of his beloved comrade of the air, Marcel Lallouette.

Lallouette was fatally injured near Villanueva y Geltru while attempting, with M. de Permangle, to put up a world light seaplane record for distance in a straight line. On their way to Tunis off the Spanish coast, they flew into a storm. They tried in vain to make Barcelona. They fell into the sea. Fishermen found them. D¹ Permangle was dead. Marcel Lallouette died in hospital an hour later.

And so the "pilgrimage" was planned for May 30, and Captain Goulette was to drop a wreath from the air into the sea. Instead of Goulette mourning his comrade that day, France mourned another of her sons—Marcel Goulette himself.

“ Do you ever think as you fly, of the possibilities of a crash ? ” was a question put half-jokingly to him in Cape Town after his flight from Le Bourget.

“ *Mon Dieu !* ” came his reply in horrified tones, “ Il ne faut pas demander ça à un aviateur ! ” (“ Good Gracious ! you must never ask an aviator that question.”)

He went on agitatedly : “ Do not say more, I beg. I cannot hear such a question. It is fatal. It is most unlucky. I shall crash. One must not think of such subjects as an evil descent out of the air. . . . *Mon Dieu. . . .* ”

Was it just superstition that forbade discussion of crashes in his presence ? Captain Goulette seemed to believe that the mascot dangling behind his head brought him *le bon chance*—that absurd little monkey made of rabbit fur with clumsy paws of cherry-coloured wood. Or did he, like Glen Kidston, have some subconscious second sight of future peril ? Who can say ?

Mollison had just returned to London in triumph, and set the gossip-writers all a-flutter with his rumoured engagement to Lady Diana Wellesley and his officially confirmed engagement to Amy Johnson, when Captain Goulette and M. Andre Salel, pilot for Farman's works, whirlwinded their way down Africa from Paris to the Cape. They flew a Farman F 190 machine with a 300 horse-power Lorraine-Dietrich engine specially incorporated to give extra speed. At the time of its great African achievement this aeroplane was a veteran of these other notable flights—Paris to Madagascar and back ; Paris to Teheran and Kovono ; Paris to Indo-China ; Paris to Cairo, and Marseilles to Djibouti and Madagascar.

Leaving Le Bourget aerodrome at five o'clock on Sunday morning, April 17, Salel and Goulette swooped down from a murky Cape sky at 12.40 a.m. on April 21. A splutter of engines and a flash of blue flame from the open exhausts, wrote “ finis ” to a

flight (by Greenwich-set watches), of three days, 17 hours, 15 minutes.

Less than a month before Mollison had flown from Lympe to the Cape in four days 19 hours 30 minutes; but as these two remarkable trips had different starting points, and Mollison flew solo in another type of plane, they cannot very well be placed side by side for record-comparison purposes. Mollison still holds the England-Cape record; the Frenchmen, what I think may best be described, the Europe-Cape record.

All the sleep Goulette and Salel had after leaving Paris was at Colomb Bechar on the Sunday night, April 17. Goulette snatched five hours and Salel two. They shared the hard work, anxieties and trials of the flight. With success, they shared all the honours—unselfishly.

This is the verbal record of their adventures, told with characteristic gestures, by the smiling dark-eyed Andre Salel, aged only twenty-seven, and the burly modest Goulette, eleven years his senior :

Goulette : We succeeded because we had *le bon chance*—good luck—and because our Farman machine was splendid. The engine did not falter once ; it did not give us a moment's fear.

Salel : All the way from Paris we have had headwinds. It seemed the wind wanted to hold us back. We wondered whether it would ever allow us to go on to Cape Town. But for the wind we should have reached Cape Town at four o'clock in the afternoon.

Goulette : Our cruising speed is 110 miles an hour. But with the wind we did not average more than 90. The winds hit us hard when we came to cross the Sahara. Up to Colomb Bechar, our first stop, there was no trouble. There I slept five hours and Salel two. But, the Sahara afterwards produced a sandstorm. For hours we had to fly

blind, trusting to our instruments and our luck. Our desert crossing took $6\frac{1}{2}$ hours.

Salel : Nigeria also was against us. We flew into a tornado, and the lightning flashed fearsomely. It was serious trouble. Eventually we had to decide to alter our course and fly round the storm.

Goulette : And when we had got away from the worst and looked for a landing ground—to go on seemed unwise—we could see none. A sea of trees below us stretched for miles and there seemed to be not one spot where we could get down. In the end we did find a landing ground in a clearing near Jibba, and we got down.

Salel : We had only four stops for refuelling—at Colomb Bechar, Niamey, Pointnoire and Walvis Bay. From the time we were over Libreville, in Gabon, we had no accidents, no troubles. But always there was the wind against us.

It is wrong to believe the rumour that the French Government is dissatisfied with its aeroplane manufacturers. It has the fullest confidence. Our plane, the *Marcel Lalouette* has done 100,000 miles with never a minute's engine trouble or a single mishap.

Goulette : But we want to talk about this flight. We saw wild animals only twice—rhinoceros in big herds at Libreville, and two jackals in the Kalahari.

Salel : But Africa from the air is tantalising. There is so much to see—wonderful places, strange animals, queer people. Yet we foolishly flash past. We see nothing. It is exciting, but not so interesting. Yet one day airmail passengers with a little more time will see more of the country than we.

Goulette : Still we kept on together. We are the best friends in the world ; ideal partners. This is our third great flight together, and the seventh I myself have made.

Salel : Everybody asks us whether we do any

other job but fly. We don't, I am a pilot for Farman's works. Captain Goulette is on the Air Force Reserve and flies as a hobby.

Goulette: We planned a flight down the West Coast several months ago—before Mollison. We planned to link the air service that goes to Brazzaville with the Cape. When Mollison broke the record we decided we might as well come through as fast as possible and win the record for France. We sent messages from Walvis Bay asking that only the corner lights of the aerodrome should be put on, because we had heard Mr. Mollison was blinded by the lights and could not land. But Mr. Fisher, of the airport, put all the lights on, and we found when we arrived that the lighting was completely efficient. It was almost as simple as landing by day. We saw it 20 miles away.

The landing—what a welcome. I thought the crowd would kill us. It was wonderful and it made us feel a thrill. A comrade behind me as we were taken to the hangars kept shouting "Vive la France!" and others joined him. I had to shake my countryman by the hand.

Salel: The drink of brandy they gave us at the hangar was like nectar; I did not feel very tired and Goulette was fresher even. But what a thirst we had. Our food *en route* was fresh fruit, concentrated malt and champagne—the best in France. We took twenty bottles. We arrived with only three.

But alas, for any thoughts they might have had of drinking to their success with the most quickly transported French champagne Africa had ever known! While 2,000 people huzza-ed and sang the "Marseillaise," at one o'clock on the morning of their arrival, a prowling souvenir-hunter rummaged unnoticed in the aeroplane cabin, and found that precious vintage. . . .

And that is the story of the great French flight

down the west coast of Africa; and the last, too, heard of the three bottles of champagne!

France has seen many of the proud feats of her airmen eclipsed, from time to time, by those of England and America. But at last she is able to boast a record that may very well stand until the days of non-stop flights, more prodigious and lightning than have yet been undertaken.

Twenty-three minutes before Captain Goulette and M. Salel landed at the Cape on April 21, a Spartan Hermes biplane swept past the airport's beacon lights, glinted in the fitful moonlight, and was gone. At the joystick was young Oscar Garden, who flew from Australia to England in 18 days in 1931. He wanted to lower the record of the Duchess of Bedford and Captain Barnard for the return Cape-Croydon flight.

His aeroplane had had a tough career in a "Flying Circus," and was used throughout South Africa for wing-walking, parachuting, looping-the-loop and other hair-raising stunts. Although Garden maintained a hot pace for the first few days, misfortune overtook him, as it had overtaken Tommy Rose, in northern Africa. Like Rose too, he faded from the news, unsuccessful.

At midnight on Thursday, May 19, 1932, Mr. Otto Thaning (vice-consul for Denmark in Johannesburg), left the Cape in a light plane for Copenhagen, with his wife as passenger. Although encountering bad weather, he reached Athens on the following Wednesday, and Copenhagen well within the seven-day schedule he planned.

Had Mr. Thaning flown the same distance of 8,000 miles, making his destination London instead of Copenhagen, he would have broken the Cape-England record by almost four days, and succeeded where Rose and Garden failed.

OTHER FLIGHTS SNAPSHOTTED

Swiss Seaplane Expedition—Engine Fails Over Jungle—Photographing Volcanoes—Lady Heath's Adventures—Flying in Paris Frock—She Faints in the Air—French Flights—Shot at by Arabs—Unexplored Country—Airman Farmer—Swedish Flight—8,000 Miles to Deliver Shaving Brush—Aeroplane in Village Street—Roy Tuckett Still Flies—Rich Italians Arrive—Record Attempt Abandoned—A Flying Actress—More Ambitious Women—Failures—Lieutenant Byas Lands in Sea—Another West Coast Flight—Imperial Airways First Passenger—Incredible Romance.

IT is not possible in this book to give detailed accounts of all the other holidaying, propaganda, and pioneering flights down Africa by English, French, Swiss and Italian aviators. Most of them had some exciting experience or other, before their planes nestled under the famous Table Mountain. All contributed to the knowledge that was gradually being accumulated, of the African skyways. I shall try in this chapter to give panned snapshots only of the outstanding flights for the past five years; that is, since Lieutenant Bentley and Lady Bailey set the down-Africa fashion.

In 1927, an African seaplane expedition was organised by private enterprise in Switzerland at a cost of approximately £10,000. It left Lake Zurich in Switzerland, for the waterways and lakes of North and Central Africa, and reached the Cape in a flying time of 100 hours. The fuel, amounting to 30,000 litres of petrol and 1,000 litres of oil, cost £1,000. The main object of the expedition, managed by Colonel Rene Gouzy, was to take pictorial records of the African flight for scientific purposes. On February 22, 1927, Cape Town saw the pilot of the

seaplane, Lieutenant Mittleholzer swinging over the city and Table Mountain in gigantic circles to take the final series of aerial pictures. Then like a silver bullet the seaplane shot down into the bay and landed in drenching spray.

The pilot was dressed like an explorer in khaki shirt, shorts and stockings. He made a gesture in appreciation of a welcoming crowd, and set to work with his cinema camera as though he were no more the object of the cheering, than the outline of the mountain. Dinghies and launches closed in on the seaplane while Lieutenant Mittleholzer filmed his own welcome. Within a few moments the Swiss Consul, the Mayor of Cape Town and other guests were being shown over the seaplane. In the metal saloon hung a picture of the highest point of the Alps. Mittleholzer was proud of that picture. It was his boast that he had flown over all the mountains he had climbed in Europe. He looked eagerly across at Table Mountain. "I shall climb that mountain," he said.

The expedition proved that seaplanes south of Beira have many disadvantages. In North and Central Africa they answer well, because good landing is afforded by numerous and permanent waterways. In South Africa, however, where many rivers are merely sand-beds most of the year and become raging torrents after heavy storms and cloudbursts; and where hundreds of miles of waterless veld blister in the fierce sun, satisfactory landing places for seaplanes are rare. Another drawback to seaplanes in Africa is the thinness of the air. The heavy type of machine used for seaplane work, makes the rising very difficult and flying more risky than in the case of the ordinary aeroplane. On one occasion at Butiaba, Mittleholzer was unable to take the air, with the result that the geologist member of the expedition, Dr. Heim, had to disembark and rejoin it at Lake Nyassa.

These scientific pioneers had some anxious moments when passing over the jungle-land. The seaplane was flying at a low altitude and for no rhyme or reason, apparently, the engine throb ceased. Tree-tops stretched endlessly ahead. The pilot sat helpless. When the forest was within 35 yards of the seaplane, the engine, as though repenting of its freakish behaviour, started up as suddenly as it stopped—and the flight proceeded.

On another occasion the engine stopped over some bogland and again, when a crash seemed inevitable, it roared out a challenge to the swamp and Mittleholzer rose into the safety of the skies.

Colonel Gouzy left the plane at Lake Victoria Nyanza and Mittleholzer flew over and photographed the active Kuri volcanoes. Volumes of volcanic smoke, according to an account by Colonel Gouzy, had been seen rolling upwards from the water of Lake Nyassa. His theory of the phenomenon was that the smoke came from disturbances under the bed of the lake. The expedition returned to Switzerland with a collection of valuable pictures, and the conviction that in the future seaplanes would become a great commercial proposition in Central and Northern Africa, though not in South Africa.

II

Lady Bailey arrived at the end of Africa with tousled hair and a quaint collection of clothes. Lady Heath, the first woman aviator to fly from the Cape to London, dropped from the buffeting of the skies at Croydon on May 17, 1928, "calm, unruffled and even with a powdered nose"—that is, according to a newspaper gossip! Descriptive writers told several million newspaper readers in tubes, trains and at dinner tables, that Lady Heath had stepped out of her sturdy aeroplane, not in conventional flying kit, but in a Paris model travelling frock! She had flown for 165 hours over 10,000 miles.

Interviewed by Reuter, she spoke of the "pleasure and comfort of journeying in a light aeroplane." She said that along the Nile, which was her guide, she was able to "read a novel and eat chocolates!" Carrying bouquets of roses and carnations that 17th day of May, 1928, Lady Heath strode with her husband away from the aeroplane as though leaving a Bond street shop.

She did not disappear from the news after that by any means. She met with numerous and varied experiences in England and America. But it is only possible here to recall that towards the end of 1928, she crashed into a roof at Cleveland, Ohio, and was seriously injured.

When in Pretoria, Lady Heath was entertained by one of that town's mushroom women's societies. I well remember how she impressed upon her hearers (many of whom had instructed their chauffeurs under peril of dismissal to keep well within the speed limit), that aeroplaning was really far safer than motoring. Her unconventional opinions and method of travel, supplied material for weeks of chatter over Pretoria's tea cups. Then, when the controversy began to lag, it was given a new lease of life. And for the reason that Lady Heath recounted an extraordinary story of her experiences between Johannesburg and Bulawayo.

"I was accompanied by Sir Pierre Van Ryneveld," said Lady Heath, "as far as Warmbaths. When I reached West Nicholson *en route* to Messina the machine was behaving splendidly. I was enjoying the flight but I began to feel the effects of the strong sun. I was flying without a helmet and severe pains in the head and the back of the neck told me that I had a touch of sunstroke. I tried to push on but I saw that I could not retain consciousness. I flew high and surveyed the country. It was unpromising (it was the Matoppos country), but I spotted grasslands and determined to make them my landing

place. I remember shutting off my engine at 6,000 feet ; but I remember no more. I woke up in a native hut to find some natives pouring sour milk down my throat. I scribbled a note which I asked the natives to send to Europeans. . . .”

Lady Heath waited for succour, although she was only about two miles from the main road, and did not know it. She waited 18 or 20 hours. The native to whom she entrusted the illegible note, at last came across a party of motorists. When they were unable to decipher the hieroglyphics scrawled on the piece of paper, the native led them to the spot where the aeroplane had landed. Lady Heath was taken to a farm and went to bed. Her aeroplane was found in good condition and flown to Bulawayo. She left later for Livingstone and home. A shield affixed to her machine was engraved with the words : “ Rhodesian Aviation Syndicate: In commemoration of your visit to Rhodesia. Be as we are—casual.”

And so while Lady Heath enjoyed herself on the way back and, according to her story to Reuter, ate chocolates and read a novel over the Nile, Pretoria's womenfolk again talked of the safety and the perils of aviation. The chauffeured motorists, who argued that the aeroplaning Lady Heath might have lost her life, were silenced by the retort of the aviation enthusiasts that aeroplanes were safe because they parked themselves perfectly even when the pilot became unconscious ! In spite of her experience, Lady Heath kept to the air.

I have read somewhere of another instance of a machine flying uncontrolled by a pilot. One day during the war the Allies saw a British plane glide over their aerodromes, make no attempt to land, and fly on towards the enemy's lines. Suspecting that a German pilot was making an escape in a British plane, several men followed and found it standing in a neighbouring field. In the cockpits were the pilot and observer, both dead. The observer had been

dead for some time, shot, and the theory was that the pilot, although mortally wounded, had switched off the engine before losing consciousness. The aeroplane had kept the air a while with its freight of two dead men, and landed on its wheels. These, however, are extremely rare occurrences.

The first flight from Paris to the Cape by French airmen was undertaken early in 1928 by two members of the French Air Force, Captain Mauler and Captain Baud. Their machine was a Caudron with a Salmson engine. During their four-month journey they travelled by easy stages through parts of French West Africa where no aeroplane had ever been seen before. Between Dakar and the mouth of the Congo, they landed on unsurveyed ground, and investigated a scheme for linking the air line from Paris to Dakar, with the Congo air service from Boma to Elizabethville. The flight was uneventful until the last stage from Mossel Bay to Cape Town when terrific head winds were encountered.

"Once," said Captain Mauler, "a terrific gust of wind caught the machine. For a moment I lost control and Captain Baud was lifted from his seat and nearly flung out of the cockpit. At Danger Point (on the Cape coast) the wind was so strong that the machine, which is usually capable of flying 100 miles an hour, could make hardly any progress at all for nearly an hour. Then we realised that our petrol supply might not last long enough to reach Cape Town. There were only a few drops left in the tank when the golf course at Somerset West (near Cape Town) offered a safe landing ground. We went down thankfully, and landed without mishap."

During the fortnight at the Cape, the machine was overhauled and the return flight was started on July 20, 1928, the luggage consisting mainly of chicken and hams. The route embraced Port Nolloth, Luderitzbucht, Swakopmund, Mossamedes, St. Paul de Loanda to Boma, then the west coast

ports to Morocco, Gibraltar, and across Spain to Paris.

The next French expedition to South Africa left Paris on April 8, 1931, and after dodging the bullets of Arab marksmen over Spanish Morocco, arrived at the Cape more than two months later, on June 16. Styled the French Colonial Air Mission, and led by M. Phillippe D. Chaterain, the expedition investigated the African air routes. Like Captain Mauler and Captain Baud in 1928, they flew down the west coast of Africa, and landed in some remote spots where aeroplanes had previously been seen only in the tattered illustrated journals that occasionally drift from the big cities to the wilds.

After their 240 h.p. Farman monoplane had scuttled away from the screaming bullet fusillade of the Arabs, there were other unpleasant incidents. Disaster was narrowly averted over the Nigerian coast. Engine trouble forced the pilot to land on a loose and sandy strip of beach. Near Leopoldville a storm forced another landing on the veld with consequent damage to the undercarriage. Then, while flying from Walvis Bay down the coast of South Africa, the monoplane was enveloped by dense fogs and rainstorms and at times passed dangerously close to the sea. The mission returned to Paris along the east coast of Africa and over Egypt.

III

Joining the Air Force as a "second mechanic," Captain Halse, athlete and musician, found that his aerial experience at first consisted mainly of peeling potatoes and cooking. It was not good enough for the youngster under twenty, who had joined up at the outbreak of the war. He wanted to fly, engage with the enemy, drop bombs. He did. Showing excellent promise as a pilot, Halse rose in rank rapidly and did a great deal of bombing. He went

through the war without a scratch though he had one crash—into a haystack.

When he returned to his farm in the Cape after the war, Halse hankered for his own aeroplane. On September 9, 1928, his dreams were realised, and with his wife in a newly-purchased Gipsy Moth left Stag Lane, probably the very first South African farmer to own an aeroplane. He wanted to fly the Moth right to his farm-door. Not for him the shipping of his aeroplane in great packing cases.

The flight was far from smooth. A succession of storms and a perilous forced landing 100 miles from Homs, were experienced before the flight down the continent proper began. A new engine had to be obtained while Captain Halse and his wife spent many weary days at Atbara. Another forced landing was made at Malakal. Mrs. Halse fell ill. But in spite of these misfortunes the farmer-airman turned up smiling at Zwartkop one afternoon. He had taken some fine pictures *en route*, but none in Italy. In that country an airman's camera is sealed by order of Mussolini. Halse flew on happily to his farm.

A few months later Squadron Leader Slatter who was senior officer in the 1927 British Schneider Trophy team, flew from Cairo to Durban, the town of his birth in one of the new all-metal Bluebirds fitted with a Gipsy engine. It was the one light aeroplane built in which passenger and pilot sat side by side. His only trouble during the whole trip was a forced landing near Mooi River.

Next to fly from Europe to the Cape was a young Swedish airman, Lieutenant Andree. He travelled 8,000 miles from Stockholm to Cape Town in 130 hours for two reasons. He wanted to inspire a proper confidence in the light aeroplane; and secondly, return to Lieutenant Pat Murdoch the shaving brush he left in a Stockholm hotel the previous year!

When his Moth bounced over the grassy Wynberg aerodrome, Andree stepped shivering from his seat.

He had crossed the Hex River Mountains, the dread of so many airmen, in intense cold, and battled with an obstinate head-wind from Bloemfontein to the Cape. A hot cup of tea soon cheered him up, but he was disappointed at the non-appearance of Pat Murdoch to claim the shaving brush. "I wired Pat before I left Beaufort West about the brush," he grinned, "and I am sorry he is not here to take delivery of it. The longer it remains in my possession the more terrified I become that it will get lost. And then I shall have flown 8,000 miles from Stockholm in vain!"

Leaving Sweden on September 21, 1929, Andree flew via Copenhagen to Berlin, from there to Vienna and across the Alps to Malta. He was accompanied by an R.A.F. escort for some distance from Malta and next touched at Tripoli, Alexandria, Wadi Halfa, Khartoum and Burgassi, where he landed in the dark, guided only by a red flash on the ground. Near Kisumu he made a forced landing in grass five feet high which had to be cut away by natives before he could race along again and take off.

The remainder of the flight was lonely and uneventful, until the Moth flew into a howling gale in the Cape. When Andree tried to get away from Beaufort West the aerodrome was sodden. His plane ploughed through mud. Whenever he opened the throttle the wheels became bogged. From time to time he employed bands of natives to lift up the Moth and transfer it to another drier spot. The indicator finally registered a good distance between himself and the earth, and then fogs and head-winds impeded him. The completion of the 8,000 miles in 130 hours 20 minutes flying time, he said, was an hour and a few minutes more than the time schedule he had planned in Stockholm. He did a great deal of propaganda work on the way back and finally returned to Stockholm in June 1930.

Towards the end of 1929 a cable was flashed from

London to the South African papers. Surmounted by bold headlines it promised the South Africans more thrills. Mr. Roy Tuckett of the Port Elizabeth Light Aeroplane Club, and well-known as an airman-cinematographer, was contemplating an attack on Pat Murdoch's record of 13 days from London to the Cape. He was going to try to knock three days off the time and was holding his Gipsy Moth in readiness, pending the authorisation of the Egyptian Government.

About six months later the residents of Touws River, a little village in the Cape Province rubbed their eyes in astonishment. Down the stretch of sand and boulders that served as a main street, they saw an aeroplane being pushed. Perspiring behind it was Roy Tuckett, who months before, had set out to reach Cape Town in ten days. His ill-luck had been on a par with that of Pat Murdoch. When he reached Alexandria on his flight out, he left his plane in charge of mechanics. The engine was running. Suddenly the plane moved off pilotless, and was badly damaged.

After a lengthy wait for repairs he pushed on, but in Uganda another crop of misfortunes befell him. An undercarriage wheel dropped off while he was in the air, and as he landed the Moth turned a complete somersault. South of Abercorn he was forced to land in a clearing in dense forest . . . and after a series of hardships, enough to depress the most ardent spirits, he struggled on to Bloemfontein. Intending to fly non-stop to Wynberg, he set off on May 9, 1930, but as petrol ran short, he landed towards evening on a farm near Touws River.

Next day he flew as far as the third green of the Touws River Golf Club, and looked for the blessed sight of a petrol pump. Off the green and on to the main street of Touws River, Roy Tuckett pushed that heartbreaking aeroplane. When the worthy citizens had recovered from the unique spectacle of an

aeroplane being wheeled down the street, they lent assistance and gathered round a kerbside pump to see its insatiable thirst slaked.

The crowd had grown bigger when the Moth was ready to leave the bumpy street and ride in the skies once more. It was pushed along towards the golf course by many willing hands, for such excitement came rarely to the little railway dorp; but before long Roy Tuckett started the engine and sprang into the cockpit. The belching exhausts shot up the dust and the wheels left the ground. Another landing was made on the course, a passenger hopped in, and Roy Tuckett roared off to Cape Town.

Touws River smiled and gossiped that day. It was not given to every dorp to see an aeroplane, which had set out to break a record, limp through its streets thirsty for petrol. "Pòor Roy Tuckett," they said over their coffee.

But Roy Tuckett was not discouraged by those misfortunes. He trailed the first Imperial Airways machine down Africa in a Puss Moth, arriving at the Cape on February 8, 1932. And as I pass on from the story of his exploits, he is planning to go to England to buy an auto-giro—the weird-looking machine that can land on a space half the size of a tennis court, and rise almost vertically—for use and demonstration in South Africa.

IV

And then came three Italians. Major Francis Lombardi, a rice merchant, Count Franco Mazotti, a young man of great wealth, the owner of five aeroplanes and a number of motor-cars, and Signor Mario Rasini, owner of a cotton factory, decided to spend a holiday aeroplaning in Fiat monoplanes to Africa from Rome. They set out on October 28, 1930, and reached the Cape amid a hurricane of "vivas" as early as November 12, although the engines were

of only 85 horse-power. For almost a month they remained in South Africa and then started for home again on December 4.

Their aeroplanes were well stored with bananas, water-flasks and biltong (sticks of salted meat), two gramophones, and a concertina. "I am only learning the concertina," said Count Mazotti before setting off. "But I shall land in the desert and practise there. . . . I will not annoy anybody then." (If only all learners were as considerate!) The three little silver and scarlet Fiat monoplanes bounded off for Tunis, the Mediterranean, Sicily and Rome . . . and on the way Count Mazotti would, perhaps, practise on his concertina in the wilds of Central Africa, while natives gazed at him in open-eyed wonder.

The same year (1930), it is interesting to note, Major Lombardi flew from Rome to Tokio in ten days.

On January 21, 1932, Major Lombardi left the Ciampino aerodrome in Italy, again bound for the Cape, but this time in an effort to set up a fresh record. With him in a light aeroplane, specially built at the famous Caproni factory in Milan, were Dr. Leonida Robbiano, relief pilot, and Signor Marino Battaglia, mechanic. Major Lombardi made a record flight from Rome to Kisumu, taking only 48 hours. After landing at Tabora on January 23, however, he was reported to have found it impossible to take off for the Cape owing to a heavy load. He abandoned the flight and returned immediately to Europe.

About the time of the first Italian flight, women again cast their eyes towards Africa. Perhaps they were inspired by the pioneering of Lady Bailey; perhaps they felt that the skyroutes of Europe were becoming too crowded, too commonly accepted. None of the flights planned got very far.

One contemplated by Miss Lola Worth, a twenty-one-year old American actress who arrived at Southampton with her own aeroplane and a mechanic

was announced towards the close of 1930. Miss Worth, ran a news, or may be, publicity item, had been flying since the age of nine, and would use her aeroplane to fly to engagements in South Africa. Miss Worth came to South Africa by boat and toured the country by train !

Miss Winifred Spooner set out with Flying Officer Edwards in a De Souta monoplane in December 1930 to fly from London to the Cape and back in ten days. To succeed they had to keep the air 17 hours out of every 24 and maintain an average speed of 100 miles an hour over the total journey of about 16,000 miles. This flight ended in a crash in Italian waters.

The third woman's flight planned for 1931 by Miss Delphine Reynolds, daughter of Sir James Reynolds, M.P., would have proved of great value if it had proceeded according to schedule. Accompanied by Flight Lieutenant W. G. Pudney, an instructor of the National Flying Services, she intended to fly to Gambia, down the west coast of Africa passing first Valencia, the Straits of Gibraltar, Tangier, the coast of Morocco and Port Etienne, and then change the land undercarriage of the plane for floats.

The ambitious project included the investigation of possible air services in the British Possessions and an attempt to encourage settlers to make use of aircraft privately. Had Miss Reynolds achieved her end, the British Air Ministry would have been furnished with much interesting data. She proceeded by easy stages on her way to the Cape but trouble with the aeroplane from time to time caused her to abandon the trip. It is to be hoped that this young airwoman will make another attempt in the future.

Yet another flying holiday was planned and carried out by Lieutenant C. W. Byas, R.N., of the Fleet Air Arm. He left England on August 22, 1931, in a baby Comper Swift, (said to be the smallest machine ever to make the flight to the Cape) to visit

his parents at Tweespruit, in the Orange Free State. The Comper Swift cost £550 and did 25 miles to a gallon of petrol. Lieutenant Byas averaged 850 miles a day at 100 miles an hour, and landed three times each day to refuel. He reached Pietersburg (Northern Transvaal), in 73 flying hours. In order to avoid passing over the Mediterranean he travelled across Asia Minor and touched at Heston, Budapest, Stamboul, Ramléh (where he landed by moonlight), Wadi-Halfa, Khartoum, Juba, Moshi, Mbeya and Livingstone. He saw a remarkable diversity of life and scenery during his ten-day trip; but was glad to leave the eagles of the Asia Minor mountains, and the locusts of the Sudan, far behind.

A furious south-easter was lashing the Cape Peninsula when he swooped over Table Bay—and landed in the sea near the Milnerton beach on the afternoon of October 21. Lieutenant Byas waded to the shore, his clothes saturated with salt water; while some coloured folk helped to bring the little continent-conqueror, also badly doused, safely to land.

The last notable flight to the Cape during 1931 was undertaken by Captain R. N. Mackintosh (whose flights in the *Princess Xenia* are referred to in the chapter on the Duchess of Bedford), and the Hon. Mrs. A. F. Westenra, sister-in-law of Lady Bailey. Mrs. Westenra married, in 1919, the Hon. Richard Westenra, brother of Lord Rossmore. They left Croydon in a Puss Moth—similar in every respect to Peggy Salaman's—on November 6, 1931, intending to fly to Cape Town by easy stages. After experiencing two night landings at Rome and Benghazi and a 60-mile an hour gale between Beaufort West and Cape Town, they reached their destination on December 2.

The return flight up the west coast was begun on December 14, and Stag Lane reached on January 17, the complete flight having taken 235 flying hours.

A few weeks later it was announced that Flight Lieutenant Edward Hedley Fielden, A.F.C., the twenty-eight-year-old pilot of the Prince of Wales's Puss Moth, was off down the West Coast on a secret attempt to break Peggy Salaman's record. There was some mystery as to his whereabouts for a couple of days, but an excited exchange of cables revealed that Flight Lieutenant Fielden had merely decided on a short flying holiday in the direction of Northern Africa, possibly in the Sudan!

The opening of the Imperial Airways mail services in 1932, was inauspicious. Air Vice-Marshal Sir Vyell Vyvyan, K.C.B., D.S.O., Lady Vyvyan, and Mr. F. G. L. Bertram, Deputy-Director of Civil Aviation, met filthy weather on their outward trip in the *City of Baghdad*, and were forced to land near Mpika in Northern Rhodesia, after vainly trying to cross a line of hills in the teeth of a storm. When they reached Bulawayo, bad news awaited them. The *City of Delhi* had been lost in the bush 46 miles away. The crew fortunately had emergency rations and water on board; but as the pilot confused two different swamps, and gave incorrect directions over the wireless, it was difficult to locate the marooned party.

Food was dropped from the air when they were eventually found, and a land rescue-expedition, guided by smoke from a signal fire, cut their way through the bush. The *Delhi* was found stuck up to the axles in a swamp, but undamaged. It meant digging a runway, and dragging the machine from one of the swamps which have bogged so many aeroplanes in the past. . . .

But Rome was not built in a day. And similarly, an air service cannot be expected to reach immediate perfection in so vast and variable a Continent as

Africa. It may be a year before the Imperial Airways' expresses run smoothly up and down Africa, carrying mails and passengers as they do from England to India. Until the services have had a fair trial, judgment should be reserved. Our modern world is often too impatient for quick results; too ready to criticise and deride; too prone to expect finality without any intermediate stages.

Could anything be more romantic than the journey of Major Ewart Scott Grogan, D.S.O., Imperial Airways' first passenger in the *City of Karachi*, who flew in eight days over the 6,000 miles he had taken two laborious years to traverse on foot thirty-six years before? He claimed to have blazed the trail, and he had the unique experience of changing the method of the worm for that of the dragon-fly.

In 1896 Major Grogan travelled by horse, mule, wagon, dhow, canoe and gunboat, but mostly on foot. He started off proudly with 150 bearers—and was found south of Khartoum two years later, bearded, tattered, exhausted, with boots tied with string, ten rounds of ammunition and a liver that was an abiding curse! In six hours in the *City of Karachi* in 1932, he covered a stretch that took him six months by foot. The sensation of time had disappeared. Nothing was left but space. He danced from kopje to kopje; hopped across the Limpopo as though hopping into Victoria Station. He was petted like a Peke dog, where he was once glad to tear at raw vulture.

"I felt like Columbus returning to America in the *Aquitania*," said Major Grogan, summing up this romance of modernity. "I have had the most marvellous experience any man could have. I have opened the floodgate of my memories, and I have been able to look back from fifty-seven years of age, flying in the sky, to myself at twenty-three years of age, crawling in the mud."

ROYAL AIR FORCE FLIGHTS

British Air Power—Air Commodore Samson—Aviation Veteran—Elephants Stampede—Night in Central Africa—Resentful Lions—Fatalities at Gwelo—Two Killed—Record Craze—4,130 Miles Non-Stop—Great Hop to Cape—"Gezaa"—Over Sardinia—Silence—"Two Very Gallant Gentlemen."

WITH the object of gaining experience in long-distance flying, and investigating the possibility of an African Civil air service, Wing Commander Pulford, O.B.E., A.F.C., led the first R.A.F. flight from Cairo to the Cape early in March 1926. The machines were military two-seater biplanes of the Fairey type fitted with 450 h.p. Napier engines and easily convertible from land machines to seaplanes. Officers were placed in charge of the different portions of the route, and it is interesting to recall that Flight Lieutenant Kinkead, D.S.O., D.S.C., D.F.C.—the South African who dived into the sea to his death later when attempting to lower the world's aerial speed record was in charge of the northern section between Cairo and Mongalla.

Cape Town was reached on April 12, 1926, without incident, unless the cracking of a tank in Flight Lieutenant Mackworth's machine, can be called a mishap. Under instructions to fly to England from Cairo on his return, Wing Commander Pulford led his flight northwards on April 19. At Aboukir, the R.A.F. pilots converted the machines into seaplanes by substituting floats for the wheels, and flew on, another 3,000 miles, to Lee-on-Solent, in England. Here the flight ended. It had successfully demon-

strated the mobility of British air power, and gained valuable information for the future civil air routes.

In a congratulatory telegram to Wing Commander Pulford, Sir Samuel Hoare, then Secretary for Air, wrote: "The successful accomplishment of this flight of 14,000 miles over land and sea without a hitch by four Service machines is a most creditable achievement. . . . There could be no more convincing demonstration of the assured future of aviation as a mobile and economical instrument of Imperial defence, and as a reliable means of speeding up communications between this country and the Dominions. . . ."

The following year, 1927, the second flight of the R.A.F. was led by the late Air Commodore C. R. Samson, C.M.G., D.S.O., A.F.C., Chief Staff Officer of the R.A.F. in the Middle East. I can still picture him one bright day at Zwartkop, with his brown-leather flying coat, little goatee, light blue eyes and golf sticks which he fingered lovingly and swept through the grass, as he chatted to Sir Pierre Van Ryneveld. He was a real aviation veteran by then, forty-four years of age, and the holder of a pilot's certificate since 1911, the very infancy of the aviation age.

Entering the Royal Navy in 1898 at the age of fifteen, he took to the air in earnest shortly before the World War, and showed immediately a predilection for high adventure. He flew the first seaplane, it is said, made the first cross-country night flights, and was the first to use a boat as an aerodrome. He raced along the deck of a man-o'-war under steam, and lifted himself over the seas while crowds of sailors and officers looked on at his reckless daring,—of so it seemed to them.

During the African flight, Air Commodore Samson and his men swooped down with howling exhausts over four herds of elephants and watched the terrified

beasts stampede in a deafening thunder of hoof-beats; they landed at outlandish spots in Central Africa and found American cars, usually driven in Broadway, ploughing along uncertain rocky roads; they impressed the native tribes with the power of the white men in the air; took part in manoeuvres at Nairobi and Tabora; and added to the fund of information gained by the Pulford expedition the previous year. The only hitch was a tyre puncture at Abercorn.

After an absence of fifty-two days, the R.A.F. planes returned to Cairo on May 22, 1927, just as Flight Lieutenants Carr and Gillman, of the R.A.F. who were attempting a non-stop dash from Cranwell Aerodrome, Lincolnshire, to India, came down in the Persian Gulf. Even as Air Commodore Samson and his pilots spoke to their brother-officers of the success of the trip, and the wonderful variety of life to be seen down Africa, Carr and Gillman were picked up by a passing steamer and their wrecked machine drifted away. Had these two managed to reach the Jask aerodrome, another hour's flying, they would have flown almost 3,600 miles non-stop.

Flight Lieutenant O. R. Gayford, D.F.C., and Air Vice-Marshal Webb-Bowen, C.B., C.M.G., Air Officer Commanding R.A.F., Middle East, led the third Cairo-Cape flight. They experienced the first piece of ill-fortune, for at N'Dola where the landing ground was sodden, the under-carriage of a machine was smashed off. It had to be dismantled and railed to Roberts Heights, whence it was forwarded to Cairo. At Nairobi and Tabora the R.A.F. co-operated in manoeuvres with the King's African Rifles.

They were accompanied as usual on their return to Cairo by four S.A.A.F. machines, and the two flights parted company at Khartoum. On their way back to Swartkop, some of the South African pilots made a forced landing in Central Africa. During the night the unpleasant roars of lions rose above the crackle

of a big fire. Revolvers were kept in readiness, but although the animal kings growled their disapproval of the human intrusion in their domain, no trouble was experienced. A couple of nights later when I spoke to the officers about it in a cosy mess at Roberts Heights, the whole adventure was treated as a huge joke. Are airmen ever serious?

The fourth flight, in 1929, headed by Squadron Leader C. R. Cox, A.F.C., and uneventful for the greater part of the journey, was marred by a terrible tragedy. One of the planes piloted Cairo-wards by Flying Officer J. W. Burnett, dived suddenly to earth after taking off from Gwelo in Rhodesia, and rebounded 30 feet in the sight of the horrified spectators. Sergeant Turner, who was a passenger in the machine, was killed outright, and Burnett died shortly afterwards from his injuries. This was said to be the first aeroplane fatality in Rhodesia.

Flying on ahead of the R.A.F. was the South African squadron entirely ignorant of the accident. They learnt of it at their next landing-place. That day, March 18, 1929, was another black day in the history of aviation. An aeroplane conducting a number of sightseers over the mighty sky-scrapers of lower New York, lost height and crashed into the New Jersey meadows opposite the city. The aeroplane broke in two, and the cabin crumpled up like a concertina. Fourteen people were killed.

The fifth flight in 1930, was led by Air Commodore A. G. Board, C.M.G., D.S.O., and early in 1931, South Africa saw for the first time huge "Victoria" troop-carrying aeroplanes under Squadron Leader H. W. Penderel, M.C. These machines which have accommodation for twenty-three fully armed infantrymen, tore along to the Cape through drenching rain. They are called the aerial police and an "insurance against trouble." Besides being able to convey men to scenes of hostility in a short time, they have also played a notable part in rescue work,

particularly during the evacuation from Kabul, when 600 men, women and children were carried over snow and mountains to places of safety.

II

It was 1929. For almost ten years the Cape had been brought nearer and nearer to London. Designers of long-distance aeroplanes smiled when they thought of the 1920 Vickers Vimy and the *Silver Queen* flying a few hundred miles a day. Pilots were thinking of immediate 3,000, 4,000 and 5,000-mile hops. Designers were preparing for future 6,000 and 8,000-mile non-stop flights. The Air Ministry in England foresaw the delivery of London mails in Egypt within 24 hours, in India within two days.

Records, aeroplane, motor-car and speed-boat, went by the board as speedily as they were set up. Since 1926 or 1927, there had been a fierce—sometimes felt, almost crazy—international competition for supremacy in the air, on land and on water. The South African airman, Kinkead, was killed while flying at an almost unheard-of speed.

France claimed the world's non-stop aeroplane record of 3,343 miles set up by Lieutenant Coste and Captain Rignot from Paris to Jask in October 1926. The United States claimed the record when Lindbergh flew 3,639 miles from New York to Paris. Then Carr and Gillman were believed to have flown 3,415 miles before coming down in the Persian Gulf. These vast distances were measured on the great globe of the Royal Geographical Society at Kensington.

And all the time the record-breaking aeroplanes soared away from Europe to Asia, from the New to the Old World, the Cape was being drawn nearer to London by the magnetic chain of aviation. Airmen began to cast their eyes along other routes, to the ends of the earth. London to India. That had been tried. Why not a non-stop flight from England to the

Cape, possibly the world's longest airline? Squadron Leader A. G. Jones-Williams and Flight Lieutenant N. H. Jenkins would attempt it. They would attempt to do in one hop what Van Ryneveld and Brand had done in laborious weeks, Murdoch in 13 days. The Fairey monoplane in which the attempt was to be made, was called the *Silver Torpedo*. Of slender build, it had a small frontal area compared with its over-all dimensions. The engine was a 530 horsepower Napier Lion, a comfortable cabin was provided for the pilot, a table for the navigator. The maximum possible space was allowed for fuel. But when all was in readiness, the weather was too bad for a reasonably safe flight.

The eyes of the aviators, impatient of continued delays, turned to the still unachieved non-stop England to India flight. They were confident of their ability to succeed with the *Silver Torpedo*, where Carr and Gillman had failed. Jones-Williams was a Canadian who won the M.C. and bar, and the Croix de Guerre in the war. Jenkins was a test pilot who was awarded the O.B.E., D.F.C., D.S.M., and wounded in an exciting air flight. They were both pilots equal to any in the R.A.F.

At 10.30 a.m. on April 24, 1929, Jones-Williams and Jenkins left Cranwell for Bangalore (India) to bring the dispute over the non-stop record to an end. At four o'clock on the afternoon of April 26, the *Silver Torpedo* passed over Karachi, but owing to headwinds and low petrol supplies, it returned to Karachi and landed. The engine had run for 50 hours 48 minutes; 4,130 miles had been covered, and the monoplane had carried a weight of about 16,000 pounds. Jones-Williams and Jenkins had made the first non-stop flight between England and India. They had pointed the way for the rapid mail and passenger services of the future.

But they were not yet content. Africa still called them. The airway that stretched down half the

world. They began to modify the *Silver Torpedo*. More fuel would have to be carried. If they had a bigger supply on the Indian flight, Karachi would have been left far behind instead of affording an undesired landing place. Something had to be done to combat the frightful tropical sun of Africa, to keep its fiery breath from the interior of the monoplane.

On the morning of December 17, 1929, the *Silver Torpedo* was ready for her next and greater adventure. Her tanks held 1,200 gallons of fuel. The flying weight was nine tons. How laughable were the aeroplanes that staggered, a few years earlier, from the ground with pilot and observer, a few tins of bully beef and biscuits, and emergency rations of water! Wireless was installed. The world wanted to listen-in. The call-sign was GEZAA. Every four hours unseen millions would hear of the progress of the *Silver Torpedo* as she spurred her path high over a dozen countries.

The news-editors of the great dailies had cabled their correspondents along the route to be on the qui vive. Plans had been made in a score of offices to bring out special editions. Photographs were ready in the art departments. The aeronautical correspondents searched their files for previous records. Columns of records and comparisons waited in type. At a moment's notice they could plunge into the thundering machines and appear a million times, moist and shiny, in torrents of banner-headed newspapers. . . .

At eight o'clock in the morning the *Silver Torpedo* shot away from Cranwell. The unseen millions listened. The hours ticked past. She was over Sardinia. More hours passed. Silence. The weather experts reported a terrific gale off the northern coast of Africa. Still no news. The editions of the evening papers flowed into the streets of London, but without news of the *Silver Torpedo*. The columns of records

still stood in type. Perhaps the altimeter had failed. Perhaps the pilot, blinded by the gale, had sought a landing place in Africa. Perhaps . . . a hundred things could have happened.

Secretly the experts feared the worst. Natives in the village of Saintemarie du Zit had heard a roar of engines in the sky and then a loud explosion. Then silence. . . .

The *Silver Torpedo* had hurtled blindly into a towering mountain, had crumpled up like a punctured paper bag. That elaborate piece of machinery, the pride of British designers, was a mass of worthless wreckage. The two record-breakers from Cranwell to India had been dynamited in a flash out of the world. In an hour or two, probably, the *Silver Torpedo* would have been over the worst part of the journey.

While snowflakes raged round the wreckage and the bodies were removed to Tunis, the newspapers told a mournful story. The triumphant columns of records and comparisons would never be blazoned over front pages. The leading columns instead, paid tribute to "two very gallant gentlemen," . . . to two men who had paid with their lives for a daring attempt to fly, without stopping, down half the world.

Elaborate preparations were again made in February 1932, by Squadron Leader O. R. Gayford, D.F.C. and Flight Lieutenant D. L. G. Bett to fly from Cranwell to the Cape, and break the long distance record of 5,012 miles held by Boardman and Polando. For a new record to be recognised by the Federation Aéronautique Internationale, it was calculated that they would have to reach a point near Zesfontein in South-West Africa—5,074.04 miles from Cranwell, and about 62 miles further than the New York-Constantinople flight.

Squadron Leader Gayford, besides commanding the 1928 R.A.F. trip from Cairo to the Cape, as I have already mentioned, served during the war in the North Sea, the Aegean Sea, South Russia and after-

wards in Somaliland against the Mad Mullah. Later he served in Constantinople and Iraq.

The hero of a number of hair-raising exploits, he was at one time engaged in the destruction of Turkish aerodromes and the bombing, from a low altitude, of the "Balkan Zug," the daily Berlin-Constantinople express. He was once brought down by a machine-gun bullet hitting his petrol tank, and landed on a Greek island narrowly escaping death at the hands of a Greek peasant who mistook him for a German.

Flight Lieutenant Bett was commissioned in the R.A.F. in 1922, served in the Middle East Command, and joined in 1927, the Cairo to Cape flight.

The great flight was to have begun at dawn on Friday, February 19, so that advantage could be had of the bright moon. Weather conditions, however, were completely against the trip: Day after day Gayford and Bett waited at Cranwell, ready to soar off along a special runway of 1,800 yards. Preparations were once more made all along the route to listen-in.

Their route was to be :

Chelmsford, Folkestone, Beauvais, Paris, Berne (near Marseilles), leave France at Cape Camarat, cross the Ligurian Sea, enter Corsica at Calvi, leaving it at Gulf de Porto Vecchio, enter Sardinia over Maddalen Island, leave Sardinia at Cape Ferrato, cross the Mediterranean, enter Tunisia near Bizerta, enter Libya 40 miles north-east of Ghadames, enter French West Africa 20 miles north-west of Chat, enter Nigeria at Karguiri, Duala, cross French Equatorial Africa to the mouth of the Congo, Loanda, Lobito Bay, Zesfontein, Walvis Bay, cross the mouth of the Orange River, and then via Cape St. Martin to Cape Town.

Bad weather continued every day for a week after February 19, and the flight was once more postponed. Squadron Leader Gayford and Flight Lieutenant Bett still intend to try for the record. The R.A.F. never give up.

PIONEERING THE UNION

Aviation History for Schools?—First Flights—Into a Ditch—Prejudice—Major Miller's Work—Accidents Surveyed—Live Bomb Kills Six—Tragedy and Humour—Testing Pilots—Iron Men Wanted—Aeroplane that Could not Descend—Lost in Desert—Dramatic Story.

SCHOOL-TEACHERS and educationists may accuse me of ultra-modernism and an unforgivable youthful presumption in daring to suggest improvements to some of their mildewed curricula. Yet, in spite of possible verbal canings, I am going to maintain :

That instead of having drummed into them the stories of the Norman Conquest, King Alfred's alleged burning of the cakes, the wart on Oliver Cromwell's nose, and the host of futile Kaffir wars which are best forgotten in a land where a native problem still awaits solution, schoolboys in South Africa should be taught the history of aviation in their own country from 1910 to the present day.

Such a course in aviation history would be useful and interesting as general knowledge, and far more stimulating than the dust-dry facts at present mugged up for examination purposes. The schoolboys of to-day will live in a great aviation age ; an age of phenomenal development made possible by the humble, often tragedy-strewn work of aerial trail-blazers. They should, I submit, know something of the sacrifices involved to revolutionise transport in South Africa. Surely the Aviation Revolution will prove no less important a factor in the world's development, than the Industrial Revolution !

And yet how many matriculated youths, who have memorised the dates of all the Kaffir wars, details of the Industrial Revolution, and the names of King Henry VIII's wives, know even the first thing about aviation progress in their own country during the last 20 years? Is there no historian to prepare the first textbook.

Since the days when "shops closed and schools were given "half-holidays" to see an aeroplane perched on the veld; when the simple people of the backveld and villages inquired the use of the windmill (propeller) revolving on the front; when a Johannesburg timber merchant in 1911 flopped ungracefully with his aeroplane into a ditch, while demonstrating how to sail safely in the heavens; . . . since those early days there have been hundreds of incidents, some tragic, some humorous, marking the progress of aviation. Perhaps as I suggest, a book will one day be written on the subject. Here I have to snapshot hurriedly some of the most interesting personalities and events during the twenty-odd years that South Africa's skies—as distinct from the skies of the Continent—have been blazed by aviation voortrekkers.

To return first to the timber merchant, who had his aeroplane constructed on the same lines as that which Blériot used to cross the Channel. The propeller was two-bladed and the engine a 28 h.p. "Jap." A Sunday was fixed for the demonstration in Johannesburg, South Africa's most go-ahead city. An excitable Frenchman shouted instructions to the dare-devil merchant. The propeller was swung round. The crowd, half in awe, half in merriment, watched it race across the aerodrome at a furious pace. The pilot struggled with the controls, the ground was left beneath—but not very far,—and then, like a tired bird, the aeroplane flipped over one ditch, into another.° The crowd turned up its nose at the twisted spars, the wreckage of months of work.

And probably reckoning that the pilot who stood inconsolable amid the mess, had learnt a lesson from his foolhardiness—returned to its traps and bicycles.

This incident did not bring air-mindedness to South Africa ; but nevertheless a small aviation company was formed in Johannesburg in May 1911. This is how a newspaper in those days described a flight by M. Brunett of the Brunett Aviation Company. “. . . M. Brunett had his machine brought from its shed, and as soon as the motor was working satisfactorily, commenced his flight. He rose about 20 feet and went a distance of 150 yards, the machine answering all the requirements made of it. M. Brunett intended having a further and longer trial, but not wishing to take risks in a stiff breeze, he did not go again. The aeroplane, which has been built at Rosebank by M. Brunett, is a Farman biplane of the latest model. . . .” Several months later, it is stated, the company went into liquidation.

Described in an advertisement as the “South African engineer-aviator,” John Weston gave a number of demonstrations of flying in South African towns in 1911 ; or, in the words of the advertisement, he invited the public to see him “on the wings of the wind—the first South African aviator to fly in his own country. . . . His career has been a long series of sensational triumphs showing the perfection of skill to which aeroplaning has been brought.”

Weston was a cautious flyer and gave exhibitions with his biplane in Pretoria, Johannesburg, Kimberley, Bloemfontein and Cape Town, but never flew to great heights. The townsfolk watched this birdman travel from 50 to 100 feet above the earth, and were impressed to some degree with the possibilities of flying. But wild horses could not have dragged the majority of them to the cockpit. Weston, besides being an aeroplane pilot, held a certificate as a balloonist, and after becoming an R.N.V.R. officer in the World War, rose to the rank of admiral.

Hot on the heels of the biplaning Weston, came two more aviators to awaken the people of South Africa, Compton Patterson and E. F. Driver. The former made the first ascent from water in Table Bay when he fitted floats to his machine ; and he also crashed at Green Point, Cape Town, in December 1911. In 1913, Patterson founded a flying school at Alexandersfontein, six miles from Kimberley, charging pupils a fee of 100 guineas. In the event of a machine crashing, the pupils were required to guarantee the payment of half the value of the machine. About a year before the war, Mr. Cheeseman, who had come out from England to act as instructor to the Kimberley flying school, crashed near the Alexandersfontein Hotel, and the school closed down soon afterwards. The war then intervened, retarding the progress of civil aviation in the Union.

II

Towards the end of the war, Major Allister Miller, who later became a Member of Parliament in South Africa, and the pioneer of commercial aviation, arrived in the Union to recruit for the R.A.F. He toured with a B.E. biplane and stirred the country's youth to join up in large numbers. In 1919 Major Miller turned his attention to aerial joy-riding and formed a company, The South African Aerial Transport Limited. A laconic public, loathe to forsake the known solidity of the earth for the doubtful safety of the air, did not give the venture great support. At the end of a year the company went into liquidation. But Major Miller was not disheartened.

He flew round the country later in a light plane, determined to make South Africa air-minded in spite of itself. He managed to awaken some enthusiasm, and light-plane clubs were formed in most of the big centres. That was in 1927, two years after the Government, on the recommendation of the Civil Air

Board, had started an experimental air mail service between Cape Town and Durban. The State project proved conclusively the advantages of aerial transport but was discontinued mainly because the machines used were unsuitable for carrying passengers.

In August 1928 Major Miller had an extraordinary experience. While he was flying a new slotted-winged Moth over the bay at Lourenço Marques, in Portuguese East Africa, a seagull dashed into the propeller. The wood was splintered, the machine got out of control and dived into the sea. Major Miller was unhurt and brought to shore by a small boat. The machine, when recovered, was found to be badly wrecked.

Major Miller took up the work of running an air mail service where the Government laid it down. On August 28, 1929, a red-letter day in the history of aviation in South Africa, a company known as Union Airways, and holding a mail contract with a Government subsidy of £8,000, began operating between Cape Town, Durban and Johannesburg. Major Miller directed the flights at first with five little Gipsy Moths. The services are still operating as I write, although there are anxious times ahead, now that the South African Government is economising, irrespective of utility and development, and withdrawing the £8,000 subsidies.

At first Union Airways were patronised by stamp-collectors, scoffed at by the general public, and given a year of existence by the "Dismal Desmonds." They have stood the test well. Through storms and howling winds their pilots have battled with the mails from and to the mailboats. They have gained hours on the trains. Business men have saved valuable time; passengers have been transported in safety, and the only fatal accident in more than two years of flying, occurred on November 13, 1931, when Captain W. F. Davenport crashed over Sir Lowry's Pass. The pilot and his two passengers, Mr. J. P.

Du Teil, Managing Director of the South African Potash Co., Ltd., Cape Town and Durban, and Mr. J. C. Young, aged twenty-eight, of Ben Nevis, Franklin, were killed. Captain Davenport had had flying experience in countries all over the world.

The public has recovered from the shock of this disaster and confidence is again steadily growing. Union Airways have begun what must develop into a network of air-lines throughout the country. When the sun of the commercial aviation age is high in South Africa, Major Miller will be remembered gratefully as the toiler in a bleak and discouraging dawn.

III

The Sir Lowry Pass triple tragedy brought the number of deaths in flying accidents up to about thirty for ten years. Before 1921 there were six people killed. Then came a period of two years during which fatal crashes were unheard of. The next victims were Lieutenants Albert Van der Byl and Armstrong Stuart, of the Air Force, and within a year the names of Lieutenants Lawson and Shaw were added to the death roll.

What will probably be recorded by the future historian as the most poignant tragedy in South African aviation, took place on May 28, 1924. Lieutenant Pierre Simond Joubert, a pilot who had seen much distinguished service in the war, was about to give a bombing demonstration at Kuruman, when a 20-pound live bomb accidentally fell from his machine. It killed six of the spectators and injured thirty-six others. How many young men of twenty-nine—Joubert's age at the time—have ever known, or will ever know, the horror, the ghastly, though undeserved, self-reproach of that unfortunate pilot? He had killed innocent people, brought suffering to happy homes. . . .

"I have been through hell the last few days," was



(LEFT TO RIGHT) COIONLI HOARI SIR PHILIP VAN RYNVELD AND (HOTEL NUMBER 1111) SGT ADKON HADIER
C R COX AI /WAKIKOP ALRODROMI



AIR COMMANDER A. G. BOARD AND G. N. BRINK (IN CIVILIAN CLOTHES)

the agonised cry of young Joubert when he addressed the Board of Inquiry a few days later. "It was an accident. I was only the instrument of Fate. These people have lost their relatives and dear ones and I will have to carry this on my shoulders for the rest of my life. . . ."

Lieutenant Joubert was charged with culpable homicide before a Judge and jury in Kimberley and acquitted. But even his acquittal, and the sympathy of the whole country must have been poor consolation to him. For the rest of his life a dreadful scar will sear his memory. What malignant Fate was it that chose him as an instrument of death and destruction? Why not somebody else? It was humanity's age-old cry; the cry that will never be answered.

The death of Dr. Joubert and Captain Dewhurst over the Harrismith aerodrome on March 12, 1928, was the beginning of a series of disasters. Within a few months, Cadet Wessels was killed outside Pretoria (I saw the wrecked plane after it had nose-dived almost within sight of the Zwartkop hangars); Mr. L. G. Hughes hit a kopje at Roodepoort in a Johannesburg Light Plane Club machine and was fatally injured; and Mr. R. G. S. Chandler, a Kimberley diamond buyer, and Captain G. W. Gordon, crashed near Kimberley and were killed. Mr. Chandler had purchased the aeroplane only a few weeks previously to make speedy business trips to the Lichtenburg diamond diggings.

The southern Cape had been singularly free from fatalities until the Davenport crash, although in 1929 Captain J. C. Don with a Mr. and Mrs. Vermaak lost their lives at Willowmore.

More recent tragedies which brought civil aviation under a cloud in South Africa have been the deaths of Charles MacDonald at Bloemfontein (1930); Mr. Gus Johnson, of Johannesburg, near the local aerodrome; Air Force Cadets John Allan King and P. J. Joubert in a collision in mid-air at Roberts Heights; William

Edward Hale at Baragwanath ; J. A. Giffis, a well known athlete, near Pretoria ; and Cadet Moritz Kruger, also at Roberts Heights.

Sad though this loss of life may be, aviation must go on profiting by mistakes, ensuring greater safety with higher speeds, until gradually it proves a pre-dominating factor in modern life. A shipwreck does not cause a wholesale prejudice against sea voyages. Aeroplane fatalities must not be permitted to sound the death knell of aviation.

IV

If I were asked to name the most "picturesque" characters in South African aviation, I would unhesitatingly reply "Frank and Shirley Solomon"—pilots in the R.F.C. during the war, introducers of the *Sky Hook* and *Clutching Hand* aeroplanes in South Africa, for two years and four months engaged in giving joy-flips, and meeting with experiences remarkable and heartbreaking.

At first in 1919, according to Frank Solomon, they had "visions of thousands of people tasting the fascinating delights of flying at substantial fees." A nightmare of tests was gone through in London before the brothers were granted civilian pilot certificates. They were spun round in revolving chairs, revolvers were fired behind their backs, and the colours of the rainbow tore past an aperture and the examining doctor demanded to know what each one was. Civilian pilots seemingly had to be a once rubber and iron men, at ease on head or feet clear-headed in a spinning chair, and as long-breathed as professional divers.

Visions of "substantial fees" and perhaps a life of luxury and retirement after a few short years were speedily shattered. The Solomons' company Aviation Ltd., undertook its first flight on November 22, 1919. An aerodrome was laid out at Muizenberg

and leased from the owner for the nominal sum of One Shilling, but it was most difficult to find a prominent citizen to launch the venture, even with the usual stereotyped remarks. The men approached seemed to have diarised engagements for months ahead, and mentioned in any case, that if an accident occurred, they might be blamed! Newspapermen, however, entrusted their safety to the Solomons and their *Clutching Hands*, and thereafter public bookings began. Women were far more venturesome in those days of flying than men.

There followed for the Solomons many ups and downs, the downs predominating. They were commissioned by a firm to fly to Port Elizabeth on an advertising stunt. Vast crowds met them at the towns *en route*. But after a fairly lucrative season in Cape Town, misfortune befell them. On a tour of the Western Province one plane landed in a quarry and the pieces were railed to the Muizenberg aerodrome. The plane was rebuilt, but then on Boxing Day, 1920, Captain Hemming, a pilot employed by the Solomons, crashed into an old ventilating stack at the Green Point Common in Cape Town. There were four deaths.

Later a machine had a forced landing. Spares not available and in spite of the encouraging cries of "carry-on," the Solomons decided to discontinue the work of the company. Civil aviation lost two of its most enterprising aviators, who in their active flying career took up over 3,000 passengers, did aerial photography, spotted whales in Saldanha Bay, suggested the carrying of mails, but found it all too unprofitable.

Most people imagine, and quite rightly, that it is often easier for an airman to descend than to climb. Frank Solomon once had an experience that seemed contrary to the laws of gravitation. He intended landing at a certain spot but could not get down in spite of depressing the elevator. Not wishing to remain aloft until his petrol supply was exhausted,

or until the natural laws again behaved themselves, he had to adopt an extraordinary course. Instead of shutting off and gliding down, he whipped open the throttle and pushed the joy-stick right forward. Frank Solomon raced down to earth in the teeth of an almost vertical air-current,—for that was the cause of his enforced sojourn in the heavens!

On another occasion Shirley Solomon saw heaven and earth exchange places while looping the loop. He had some exciting moments preventing himself from hurtling after the aerial accessories to earth.

For several years the Solomons faded from the aerial limelight. But in 1930 Frank was again in the headlines when he was lost with a passenger for four days in the South African desert. Listen to Frank Solomon tell his graphic story:

“When I set off on my flight to Luderitzbucht with J. Spence at five o'clock on the morning of November 25 I did so with a pleasant sense of seeing new country, and hoped to be back in town again within a few days. All went well until we were at a point somewhere about midway between Alexander Bay and Luderitzbucht, when engine trouble developed and I had to land on the beach.

“There were some buildings under a hill about 500 yards from where I landed, and Spence immediately went to see if he could get assistance. While he was away I located and remedied the trouble. He returned while I was still busy, and reported that the buildings had evidently been abandoned for some years. It was an old German police post known to him.

“The wind was blowing with semi-hurricane force, and I decided that it would be exceedingly risky to take off at once owing to the fact that we had landed in drift sand. I therefore decided to wait until dawn next morning, by which time I hoped the wind would drop.

“ Spence and I carried sheets of iron from the building and placed them in front of the machine to make a runway. The wind was so fierce that we had the greatest difficulty in getting the iron to the machine, and it took us practically the whole afternoon to carry down six pieces.

“ The wind and the heavy sand scorched our bodies and dried our mouths, and we very imprudently drank nearly half our water supply of one gallon. I had in earlier years done a good deal of flying in this country, and had on several occasions landed in God-forsaken spots through heavy winds or engine trouble, and so had learned the wisdom of carrying water and a small supply of food. On this occasion I had the water mentioned, a loaf of bread and three tins of bully beef.

“ At dawn next morning we started the engine up and endeavoured to manœuvre the machine over the iron more directly into the wind, but in a shorter time than it takes to tell the starboard wheel left the iron and sank up to the axle in some drift sand, the tail went up in the air, the machine stood on its nose, and before I could do anything a gust of wind hurled it over on its back, at the same time throwing me out.

“ I only just managed to crawl to safety in the nick of time, otherwise I might have been severely injured. Spence, who was on the ground, had been doing his best to avert the disaster, and as I rose from the ground I noticed that he had gone a ghastly white.

“ Very little damage was done to the machine, but without material and help we could do nothing. We took our precious supply of water and our food to the buildings and then made several journeys backwards and forwards for anything that might be useful.

“ Our position was serious and we at once decided that only sufficient water was to be taken

to moisten our lips, at three-hour intervals. We reviewed the position. A road ran from the north to the south, but we thought it was about 20 miles away, and felt quite certain that in that sandy waste there would be no traffic except at perhaps long intervals. We felt also that our water supply was, in any case, hopelessly inadequate to get us there and that even if we succeeded we would perish miserably.

"My wife had been told that we would follow the coast, and after considering all aspects we decided that the safest course was to remain where we were. Towards midday Spence remembered that there was about half a pint of tea left in my thermos flask and he went to the machine and got it. It was sour and almost colourless, but under the circumstances it was a godsend and we decided to make it last till next morning and leave the water.

"We had had nothing to eat since the previous night and tried to eat, but our parched condition made it almost impossible to swallow and we could not eat more than one ounce each.

"I knew that sooner or later an aeroplane would search for us and so we spent the afternoon making a bonfire of all the odd bits of wood lying about. I found a paraffin tin and on lifting it was overjoyed to feel that it contained a good quantity of what I believed must be water. For a moment my heart galloped wildly. I feverishly poured out a drop and found it was paraffin! However, it was something to assist the bonfire so I found a rusty gallon paint tin and filled it and put it beside our bonfire with a big stone over it to protect it from the wind.

"We got another tin, filled it with paraffin, made a wick out of a piece of rotten rope we found and by its spluttering light we again discussed matters on that second night.

"Then Spence had a magnificent inspiration

It was that we should make a still and condense sea-water. The night was bitterly cold and at about 4 in the morning I woke up shivering violently.

"I heard a scratching noise and sensed danger. My matches were handy. I struck one and felt my cheeks flush, for not four feet from me were two jackals at our larder. It was a miracle that they did not overturn our precious water tin.

"I waited till dawn and then Spence took the thermos, a broken bucket, and everything that could hold water, and went on the long walk to the sea to get water for distilling. I went to the aeroplane and removed a petrol pipe, and with that, some rubber tubing off the aeroplane telephone, a water bottle and a tin, I constructed our still after about two hours' work.

"We felt fairly confident of success, and so allowed ourselves an extra ration of our water supply, but we could not eat. Then we commenced to distil. The condensed water trickled out of the tube and tasted wonderful. Shall I ever forget that moment? Just a drop at a time, and at long intervals, but water. The wood was as dry as a bone, but would not burn. It was dead like everything else in that soul-destroying hole.

"We dipped each piece in paraffin and between 9 and 10 o'clock had distilled three-quarters of a bully beef tin full, which we poured into a water bottle. Spence and I decided to have a gorgeous feast of two ounces of bully each, a bit of bread, and all the distilled water. He went to prepare the 'table' and I to take a look to sea for any passing boat.

"After a minute or two the dinner gong sounded. We got the water bottle, metaphorically smacked our lips—we wouldn't do it literally—and commenced to ration out the distilled water. It poured out for a split second, and then, to our astonishment, stopped, and from the mouth of

the bottle the head of a mouse appeared: The creature had crawled in during the brief interval we were away from the bottle!

"However, mouse or no mouse, we were going to have our carousal, and so, with a little wangling, out came the water.

"We smiled gaily at each other, and started to drink and choke. The water was salt; the mouse must have contaminated it! We drew on our reserve water supply to the extent of an ounce or so each, and forced ourselves to eat about 2 oz. of food each and miserably went back to our distilling operations.

"By that night—we had become so expert—we had practically a small cupful each. Then for the first time for two and a half days I really felt the unutterable, if fleeting, joy of really drinking.

"The third night passed as miserably as the others. The next morning (the fourth day), Spence accepted the position of water manufacturer and I that of look-out.

"We had a little tobacco, and smoked half-pipes at intervals of about one hour, and that did a great deal towards alleviating our thirst.

"We were both beginning to feel groggy and disheartened, although I saw no reason why we couldn't hold out for another four or five days or more. I stood outside the hut while Spence was getting water at the beach and for the first time noticed a skull and cross bones painted on one of the buildings in black with the inscription 'memento mori' underneath.

"I looked shudderingly away and as I turned a black bird—a duiker—and the first I had seen—flew directly over my head not more than 15 feet up. I pulled myself together and told myself not to be a fool.

"We had a sip of water at 6.30, but no food, and settled down to our jobs.

“ At about 7.30 I heard an aeroplane approaching and saw it coming from the south and about a mile to the east of us. I hastily poured the paraffin over our wood pile and put a match to it. It flared up like a damp squib for a second and immediately went out. A moment later the aeroplane had disappeared.

“ I need not say what my feelings were. I did not expect the machine—which I have since learnt was piloted by Lieutenant Fisher, of the South African Air Force—would return over the same ground, but I went to the machine and drained some petrol from one of its tanks and took up my vigil again.

“ To my surprise I heard the plane again at about two o'clock and in a second had a great blaze going. I had piled some rotten bags on it and it made an excellent blaze and a large volume of smoke resulted, but again we were unobserved, and despair really began to grip us as we reasoned that Lieutenant Fisher would report that we were without doubt not on the coast.

“ I sat the entire day watching and waiting on a little kopje and occasionally I made a small smoke fire. It was impossible to keep one going all the time. Spence sat in the hut and distilled, and so we could not even have each other's company. I felt that help would come sooner or later; but there was the ever present uncertainty, especially as the coast had already been scrutinised.

“ That afternoon, late, we took stock of our water supply and found that if had been evaporating and that there were only about $1\frac{1}{2}$ pints left. We sealed the tin up with some sticking plaster I had in a first-aid outfit, drank the afternoon's output of distilled water, and forced down some bully and bread.

“ When we arrived at our private seaside resort—let me recommend it to business men in need of

thorough quiet—there were not even flies there. Then our bathing friend the field mouse called, and within 48 hours the place was overrun with mice. Incredible as it may seem, they tried to get at the distilled water receptacle which Spence kept between his feet, and between stoking the fire he had to swipe them with a piece of iron and actually killed several.

“The next day, Friday, came and Spence began to wonder how much longer he could keep up making distilled water. He seemed to feel our privations more than I did and looked ill. Through the whole time we ate practically nothing—our thirst prevented us, much as we tried to. Our nerves were getting worse, but we managed to crack an occasional joke. I spent the whole of Friday in the eternal desert wind scrutinising the sea for ships and the sky for aircraft, and wondering and wondering. Life, I reflected, wouldn't be so hard to give up. Here was the cool, inviting sea. Death itself frightened me not at all, but my thoughts were not of my own poor soul, but of others who were dependent on me.

“The irony of it! I wondered just at what stage the sea should have me. There was plenty of time, days and days, but it must not be left too long, otherwise one wouldn't have the strength to drag one's exhausted body over that long stretch of heavy sand to the cool water's edge.

“But, we argued, we shall be found long before that becomes necessary. But should we? Of course, we should. I wondered. If only the scorching, irritating wind would drop a bit and those darned mice wouldn't sit round and grin every time one went into the hut. I sometimes hurled stones at them, but every time I did so the crash of the stone against the wooden floor would send shivers down my spine as though I was the attacked and not the mice.

“Friday came to an end at last, a long day like the rest—from 4.30 in the morning to 8 at night.

“On Saturday morning we held a council of war and again discussed the possibility of walking somewhere along the coast. If we could have distilled sufficient water we might have tried, but that was impossible, and we had only about a pint of our original supply left, and in any case, we were getting weak and didn't know where to walk to. And moreover, our distilled-water apparatus was becoming fouled and stank abominably. The condensed water itself was gradually becoming less plentiful and rank. It tasted like water from some polluted pool. That didn't worry us for after all it was water, but we feared it would become worse.

“Spence found a few pages of a newspaper dated September, 1920, and also some of a German paper dated 1922. We also found a quarter-bottle of vinegar, and used some of it to moisten our lips. It seemed to afford relief. There was a curious cactus-like plant growing near the hut which, when squeezed, gave a liberal supply of slightly opaque juice. I squeezed some on to the palm of my hand and drank it, but it was tart, caused a tightness in my throat and generally gave me wind-up.

“At about twelve o'clock on Saturday, Spence and I were discussing the possibility of another bonfire in case another aeroplane passed when we saw three men approaching us from the east. It was a police patrol under Captain Woolcott. I cannot describe my feelings at that moment. They had come by car, and it will always be a wonder to me that it was possible for them to motor to within a couple of miles of where we were over country that even a camel would dislike.

“Captain Woolcott treated us with unstinted kindness, and we shall always be grateful to him.

He gave us brandy, water, tea and beer all at once and we drank the lot. We also had something to eat and were taken over land about 126 miles to Luderitz—miles upon miles of the journey through great towering sand dunes. We arrived at Luderitz on Sunday about noon, and there met Mr. Louw, of the Vacuum Oil Co., who had located our machine after we had left with Captain Woolcott. Aeroplanes, camels, 'Ovambo native runners, motor cars, wireless, everything possible had been done to locate us. . . ."

Such is a brief outline of the history of aviation in South Africa. Won't our educationists give it a chance ?

XIX

WHAT OF THE FUTURE ?

Petrol-Fed Lightning—Looking Ahead—New Marvels—Germiston, Africa's Croydon—Opening Up Continent—Luxury Air Travel—Jungle Hotels—To Fight Bad Weather.

WHAT of the future? Aircraft designers have assembled aeroplanes that can hurtle through the air at 350 or 400 miles an hour. Compared to such petrol-fed lightning, Sir Malcolm Campbell's 253 miles an hour, in his *Bluebird* at Daytona Beach on February 24, 1932, seems rather tame.

But the brains of the world are not yet satisfied. New marvels are sought. Bigger and faster aeroplanes are being planned and built. Aerial passenger and mail traffic is for ever being speeded up. The records of to-day will be commonplace to-morrow.

Trade was said to follow the flag. In the future it will follow the aeroplane trail. No longer will the countries of the world be content for steamers to plough through the oceans to foreign lands. Aerial liners, as luxuriously equipped as the floating tourist palaces of 1932, will sail at 100, 200, 300—who knows?—miles an hour, along a maze of skyways above the five continents. Transcontinental telephone calls and aeroplane trips will be as common in the next ten or twenty years, as the local "hulloes," joy-flips, tube and train-catching we know to-day.

A passenger in an air liner over Germany will be able to dictate letters to a televised stenographer in his London office. A broadcast symphony concert in Berlin or Vienna will follow him as, arm-chaired, he

smokes a cigar, or reads the *Aerial Evening News* at night over the Atlantic—somewhere between Europe and the United States, or on the way to the Far East.

These aviation wonders I leave to other pens to describe. What of the future of aviation in Africa? Like the rest of the world, Africa is starting on an era of great aerial promise.

Germiston, a mining town and railway junction near Johannesburg, is to become the continent's Croydon—ten days from London. Imperial Airways, whose manager in South Africa is Captain F. R. Walker, are bringing the Cape within eleven days of London; perhaps nearer in the future. The intermediate towns in the tropical regions and Northern Africa, will be linked to civilisation instead of isolated and quinned in forsaken wastes from their fellow-men.

There will be a network of daily services between all the important centres of South Africa. Trade will be fostered among the continent's northern territories now hindered in development by impossible transport. The vast resources of Africa will be exploited. Immigration will be encouraged. A host of possibilities thrust themselves before us.

At Germiston there is already a large hangar to accommodate the Imperial Airways machines. In busy workshops skilled engineers are employed to undertake the general overhauling of aircraft and engines. Offices are occupied by a headquarters' staff, and barrack quarters and bungalow residences by senior staffs and pilots.

Stacks of urgent mail matter for delivery in Europe and England in little more than a week, will pour in increasing streams into Germiston from all parts of South Africa. Cape Town passengers *en route* for England will put up in Johannesburg after a non-stop flight of a day from the Cape, and join their fellow-passengers from the Rand and elsewhere at the airport the next morning. Valuable cargoes of

gold will be shipped by air by the Chambers of Mines. The departure of air liners from Germiston will be as much an event as the departure of the mail boats from Table Bay, and, on a smaller scale, from Southampton.

When the London-Cape passenger service is in full swing, Cairo will become an important aerial junction. Passengers for India and Africa will leave London in the same machines, cross over Europe and part company at the Egyptian capital. In order to meet the increased traffic between London and Cairo, two new types of aircraft are being employed—the Handley Page 42-seater, and the Short Kent flying boat. These machines are designed to carry 38 passengers in addition to crew, mail and freight. Passengers for towns on the African route will fly on from Cairo to Khartoum in an Argosy aeroplane. From Khartoum to Kisumu, the Short Calcutta flying boat will be used, and the remainder of the journey completed in De Havilland Hercules planes. The average cruising speed of all these machines will be from 90 to 95 miles an hour; but Air Vice-Marshal Sir Vyell Vyvyan, K.C.B., D.S.O., has predicted the use of new four-engined monoplanes, with a cruising speed of 120 miles an hour, on the African route towards the end of the year. These monoplanes will first be tried out on the European air lines.

Those who make use of the London-Cape route, besides travelling in comfort during the day, will be provided with all the amenities of the modern hotel at the night-halts in Africa. Bungalow hotels have sprung up. At Mbeya, in Tanganyika, to give one instance, a bungalow hotel equipped with comfortable lounge, restaurant and sleeping apartments, has been erected. When passengers disembark for the night and mechanics examine the airships, they will find the glistening napery, sparkling glasses, good cheer and menus of a hotel that might nestle amid

the streets of a big city, instead of in the African wilds.

Most important is the erection of meteorological stations which will advise pilots of weather conditions along the route. Forewarned in Africa is doubly forearmed. If the Imperial Airways service is to be a success and aviation to progress, the risk of being impeded and forced down in bad weather must be reduced to a minimum. Aerodromes will have to be improved out of all present knowledge. The misfortunes attending the opening of the Imperial Airways services must have brought that forcibly home to the Governments in whose territory landing-places are provided. A fortune awaits the designer of the all-weather-all-year-round air liner, or at least, one proof against the periodical vile weather of this Continent.

Johannesburg, great city of gold, flanked by a dozen mining towns, ranks among the most important centres in the British Empire. As the pivot round which the air-lines of Africa will swing in future, it is assured of a development as meteoric as that of its first forty-odd years. And in that development the rest of the African Continent, now struggling towards the light of aviation, will share.

